

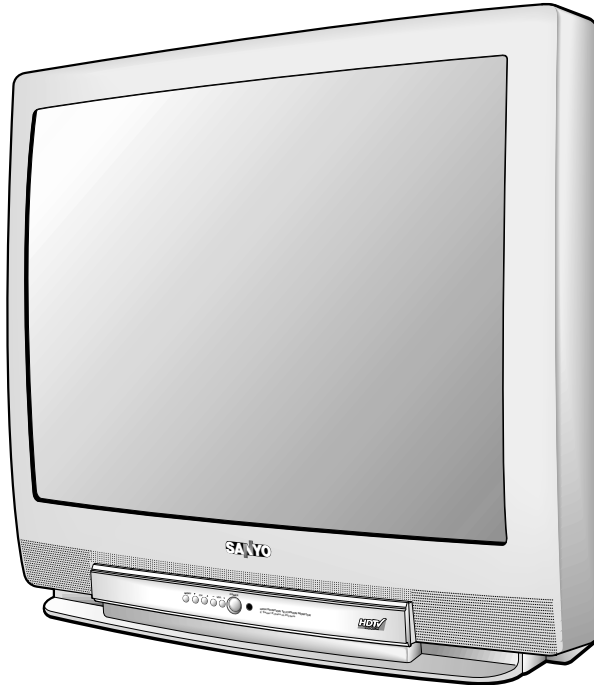
FILE NO.

## SERVICE MANUAL

## Remote Control Color Television

**DS32830H** (U.S.A.)  
(CANADA)

ORIGINAL VERSION



Chassis No. 32830H-00

**NOTE:** Match the Chassis No. on the unit's back cover with the Chassis No. in the Service Manual.

**If the Original Version Service Manual Chassis No. does not match the unit's, additional Service Literature is required. You must refer to "Notices" to the Original Service Manual prior to servicing the unit.**

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### Specifications

Power Rating .....	120V, 60Hz 160W (Avg), 3.0A (Max)
Antenna Input Impedance .....	75Ω UHF/VHF/CATV
Receiving Channel .....	2 - 13 (VHF), 14 - 69 (UHF), 01, 14-94, 95-125 (CATV)
Remote Ready .....	44 Key Remote Control
Sound Output .....	3.0 W/CH
Intermediate Frequency	
Picture IF Carrier .....	45.75MHz
Sound IF Carrier .....	41.25MHz
Color Sub Carrier .....	42.17MHz
Picture Tube .....	A80AEJ15X12
Semiconductors	
Integrated Circuits .....	37
Transistors .....	93
	Except within Tuner, RC Pre-Amp. and I/P Converter Board
Cabinet Dimensions	
Width .....	762 mm
Height .....	707 mm
Depth .....	538 mm

# SAFETY INSTRUCTIONS

## SAFETY PRECAUTIONS

**WARNING:** The chassis of this receiver has a floating ground with the potential of one half the AC line voltage in respect to earth ground. Service should not be attempted by anyone not familiar with the precautions necessary when working on this type of equipment.

*The following precautions must be observed:*

1. An isolation transformer must be connected in the power line between the receiver and the AC line before any service is performed on the receiver.
2. Comply with all caution and safety-related notes provided on the side of the cabinet, inside the cabinet, on the chassis, and the picture tube.
3. When replacing a chassis in the cabinet, always be certain that all the protective devices are installed properly, such as control knobs, adjustment covers, shields and barriers.

**DO NOT OPERATE THIS TELEVISION RECEIVER WITHOUT THE PROTECTIVE SHIELD IN POSITION AND PROPERLY SECURED.**

4. Before replacing the back cover of the set, thoroughly inspect the inside of the cabinet to see that no stray parts or tools have been left inside.

Before returning any television to the customer, the service technician must perform the following safety checks to be sure that the unit is completely safe to operate without danger of electrical shock.

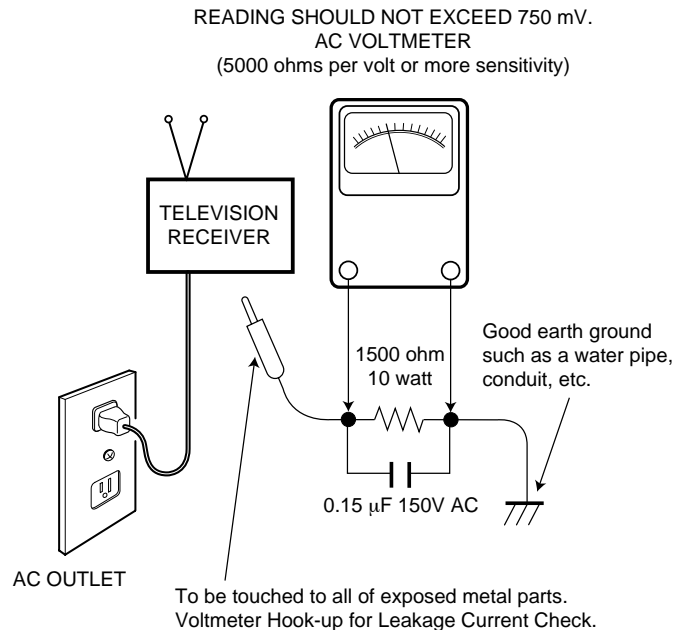
## ANTENNA COLD CHECK

Remove AC plug from the 120 VAC outlet and place a jumper across the two blades. Connect one lead of an ohmmeter to the jumpered AC plug, and touch the other lead to each exposed antenna terminal (UHF and VHF antenna terminals). The resistance must measure between 1M ohm and 5.2M ohm. Any resistance value below or above this range indicates an abnormality which requires corrective action.

## LEAKAGE CURRENT CHECK

Plug the AC line cord directly into a 120 VAC outlet. (Do not use an isolation transformer for this check.) Use an AC voltmeter, that has 5000 ohms per volt or more sensitivity. Connect a 1500 ohm 10 watt resistor, paralleled by a 0.15  $\mu$ F 150 VAC capacitor, between a known good earth ground (water pipe, conduit, etc.) and all exposed metal parts of the cabinet (antennas, handle bracket, metal cabinet, screw heads, metal overlays, control shafts, etc.). Measure the AC voltage across the 1500 ohm resistor. The AC voltage should not exceed 750 mV. A reading exceeding 750 mV indicates that a dangerous potential exists. The fault must be located and corrected. Repeat the above test with the receiver power plug reversed.

**NEVER RETURN A RECEIVER TO THE CUSTOMER WITHOUT TAKING THE NECESSARY CORRECTIVE ACTION.**



## X-RADIATION PRECAUTION

The primary source of X-RADIATION in solid-state receivers is the picture tube. The picture tube is specially constructed to limit X-Ray emission. For continued X-RADIATION protection, the replacement tube must be the same type as the original (including the suffix letter in the part numbers). Excessive high voltage may produce potentially hazardous X-RADIATION. To avoid such hazards, the high voltage must be maintained within specific limits. Refer to the X-RADIATION WARNING NOTE on the CHASSIS SCHEMATIC in this service manual for specific high voltage limits. If the high voltage exceeds specified limits, check the components specified on the chassis schematic diagram and take the necessary corrective action. Carefully follow the instructions for the +B Voltage Check and the High Voltage Check to maintain the high voltage within the specified limits.

## HIGH VOLTAGE HOLD-DOWN TEST

To prevent X-RADIATION from the picture tube due to excessive high voltage, a HOLD-DOWN circuit is provided in the high voltage circuit. Every time the receiver is serviced, the high voltage HOLD-DOWN circuit must be tested for proper operation. Refer to the HIGH VOLTAGE HOLD-DOWN TEST in service adjustments.

## PRODUCT SAFETY NOTICE

When replacing components in a receiver, always keep in mind the necessary product safety precautions. Pay special attention to the replacement of components marked with a star (★) in the parts list and in the schematic diagrams. To ensure safe product operation, it is necessary to replace those components with the exact same PARTS.

# SERVICE ADJUSTMENTS

## GENERAL

This set has an On-screen Service Menu system included in the CPU that allows remote operation for most of the service adjustments.

## ON-SCREEN SERVICE MENU SYSTEM

### 1. Enter the Service Menu:

- While pressing the MENU key, reconnect the AC power cord. The Service Menu Display will now appear. (See Figure 1.)

### 2. Service Adjustments:

- Press the ▲ or ▼ key to select the desired service menu you want to adjust. (See page 5 for On-screen Service Menu.)
- Use the + or – key to adjust the data. (For Sub - Address see below)

### 3. Exit from the Service Menu:

- Press the MENU key to turn off the Service Menu display.

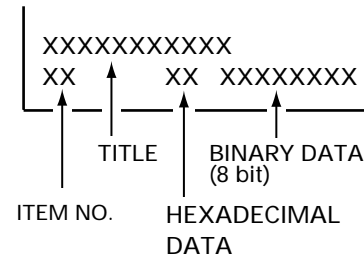


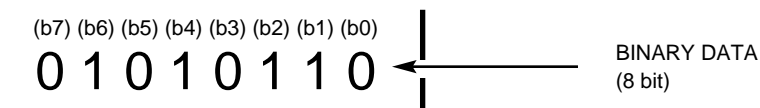
Figure 1. Service Menu Display

## ADJUSTMENT FOR SUB ITEM (ADDRESS)

Some service data has Sub - Address. Use the numeric keys (from 0 to 7), to adjust the data of the Sub - item.

## ADJUST DATA OF SUB-TITLE

1. Find the title and its bit of binary data from Table 1 (On-Screen Service Menu).
2. Enter the service menu (see above) and select the item number needed with the ▲ or ▼ key.
3. With the numeric key (from 0 to 7), change the bit data. Each time the numeric key is pressed, the data changes from 0 to 1 alternately. For example, to change the data of bit 5, press the "5" key.



## IC802 (EEPROM) REPLACEMENT

When IC802 (EEPROM) is replaced, IC801 (CPU) will automatically write the initial reference data into IC802 for basic TV operation. However, the bus data should be checked and some bus data should be set up before attempting the service adjustments. (See Table 1. on pages 5 – 11 for detailed bus data information.)

## INITIAL BUS DATA SETUP

Note: When IC802 (EEPROM) is replaced, change the following initial reference data for proper TV operation before attempting service adjustments.

1. Disconnect the AC power cord (AC 120V line).
2. While pressing the MENU key, reconnect the AC power cord. The Service Menu display will now appear.
3. Select NO. 102 SHU2PO (Sub Hue / Pre/Over Shoot) with ▲ or ▼ key. Adjust the data with number keys for 13.
4. Select NO. 103 SLC2CTI (Sub Color / CTI Level) with ▲ or ▼ key. Adjust the data with number keys for 1B.
5. Select NO. 106 RD2PTL (R Drive / P Limit Level) with ▲ or ▼ key. Adjust the data with number keys for 70.
6. Select NO. 107 GD2ABLM (G Drive / ABL Mode) with ▲ or ▼ key. Adjust the data with number keys for 73.
7. Select NO. 108 BD2CTIM1 (B Drive / CTI Mode) with ▲ or ▼ key. Adjust the data with number keys for 70.
8. Select NO. 109 SBR2GAM (Sub Bright / Gamma) with ▲ or ▼ key. Adjust the data with number keys for 2E.
9. Select NO. 10A RCT2LTIM1 (R Cutoff / LTI Mode) with ▲ or ▼ key. Adjust the data with number keys for D4.
10. Select NO. 10B GCT2DPL (G Cutoff / DPIC Level) with ▲ or ▼ key. Adjust the data with number keys for 7D.
11. Select NO. 10C BCT2DCT (B Cutoff / DC Transit) with ▲ or ▼ key. Adjust the data with number keys for 9D.
12. Select NO. 111 YOF4VD2VF (Y Offset / VM Delay / VM FO) with ▲ or ▼ key. Adjust the data with number keys for 06.
13. Select NO. 113 GYR4GYB (G-Y/R / G-Y/B) with ▲ or ▼ key. Adjust the data with number keys for 66.
14. Select NO. 114 VML4FLC2FLS (VM Level / FLCOL / FLCOL Switch) with ▲ or ▼ key. Adjust the data with number keys for F8.
15. Select NO. 116 VS2VON1ED (V Size / V On / EW DC) with ▲ or ▼ key. Adjust the data with number keys for 86.
16. Select NO. 11D PPH2UPO1VPS (Pin Phase / UC Pol / VBLK SW) with ▲ or ▼ key. Adjust the data with number keys for 79.

# SERVICE ADJUSTMENTS (Cont.)

## INITIAL BUS DATA SETUP (Cont.)

Note: When IC802 (EEPROM) is replaced, change the following initial reference data for proper TV operation before attempting service adjustments.

17. Select NO. 11E HPO2CSH1NIN (H Position / CLP Shift / Non Inter) with ▲ or ▼ key. Adjust the data with number keys for 60.
18. Select NO. 126 VCP4HCP (V Comp / H Comp) with ▲ or ▼ key. Adjust the data with number keys for 37.
19. Select NO. 131 RF Hue (RF Tint) with ▲ or ▼ key. Adjust the data with number keys for 01.
20. Select NO. 132 5I-HUE (525I Tint) with ▲ or ▼ key. Adjust the data with number keys for 04.
21. Select NO. 133 5P-Hue (525P Tint) with ▲ or ▼ key. Adjust the data with number keys for FF.
22. Select NO. 134 1I-Hue (1125I Tint) with ▲ or ▼ key. Adjust the data with number keys for 01.
23. Select NO. 13B RF-COL (Rf Color) with ▲ or ▼ key. Adjust the data with number keys for FE.
24. Select NO. 13C 5I-COL (525I Color) with ▲ or ▼ key. Adjust the data with number keys for 07.
25. Select No. 146 5I-BRI (525I Bright) with ▲ or ▼ key. Adjust the data with number keys for F0.
26. Select No. 14A RF-SHP (RF Sharpness) with ▲ or ▼ key. Adjust the data with number keys for 10.
27. Select No. 14B 5I-SHP (525I Sharpness) with ▲ or ▼ key. Adjust the data with number keys for 10.
28. Select No. 14C 5P-SHP (525P Sharpness) with ▲ or ▼ key. Adjust the data with number keys for 04.
29. Select No. 14D 1I-SHP (1125I Sharpness) with ▲ or ▼ key. Adjust the data with number keys for 04.
30. Select No. 150 RF-LLV (RF LTI level) with ▲ or ▼ key. Adjust the data with number keys for 02.
31. Select No. 151 5I-LLV (525I LTI level) with ▲ or ▼ key. Adjust the data with number keys for 02.
32. Select No. 152 5P-LLV (525P LTI level) with ▲ or ▼ key. Adjust the data with number keys for 02.
33. Select No. 16B RF-VMD (RF VM Delay) with ▲ or ▼ key. Adjust the data with number keys for 01.
34. Select No. 16C 5I-VMD (525I VM Delay) with ▲ or ▼ key. Adjust the data with number keys for 01.
35. Select No. 16D 5P-VMD (525P VM Delay) with ▲ or ▼ key. Adjust the data with number keys for 01.
36. Select No. 16E 1I-VMD (1125I VM Delay) with ▲ or ▼ key. Adjust the data with number keys for 00.
37. Select No. 184 RF-VLV (RF VM Level) with ▲ or ▼ key. Adjust the data with number keys for 0F.
38. Select No. 185 5I-VLV (525I VM Level) with ▲ or ▼ key. Adjust the data with number keys for 0F.
39. Select No. 186 5P-VLV (525P VM Level) with ▲ or ▼ key. Adjust the data with number keys for 0F.
40. Select No. 187 1I-VLV (1125I VM Level) with ▲ or ▼ key. Adjust the data with number keys for 0F.
41. Select No. 1AA 5PNHSI (Video / 525P 4:3 H Size) with ▲ or ▼ key. Adjust the data with number keys for FE.
42. Select No. 1AB 5PNHPO (Video / 525P 4:3 H Position) with ▲ or ▼ key. Adjust the data with number keys for FB.
43. Select No. 1C2 1INHPO (Video / 1125I 4:3 H Position) with ▲ or ▼ key. Adjust the data with number keys for 12.
44. Select No. 042 SHA4SCO (Sharpness / Sub Contrast) with ▲ or ▼ key. Adjust the data with number keys for 67.
45. Select No. 051 FS6VT4HW2HS1HT (Fix Sync / V TC / H Width / H Sep Sel / HD TC) with ▲ or ▼ key. Adjust the data with number keys for 30.
46. Select No. 080 ATT (Audio Input Level) with ▲ or ▼ key. Adjust the data with number keys for 07.
47. Select No. 08B PLH (PIP H Position Left) with ▲ or ▼ key. Adjust the data with number keys for 12.
48. Select No. 08C PRH (PIP H Position Right) with ▲ or ▼ key. Adjust the data with number keys for 70.
49. Select No. 08D PCN (PIP Sub Y Out) with ▲ or ▼ key. Adjust the data with number keys for 40.
50. Select No. 08F PCO (PIP Color) with ▲ or ▼ key. Adjust the data with number keys for 40.
51. Select No. 090 PTI (PIP Tint) with ▲ or ▼ key. Adjust the data with number keys for 3A.
52. Select No. 091 OSD (OSD H Position) with ▲ or ▼ key. Adjust the data with number keys for 06.
53. Select No. 096 IOS (Video3 1080I H Position) with ▲ or ▼ key. Adjust the data with number keys for FA.
54. Select No. 0A2 3DYC0A (3D Y/C Separation Data) with ▲ or ▼ key. Adjust the data with number keys for 00.
55. Press the MENU key to turn off the Service Menu display.

**Table 1. ON-SCREEN SERVICE MENU**

When IC802 (EEPROM) is replaced, check the bus data to confirm they are the same as below. The shaded menu should be checked and be set up or readjusted according to the procedures described in the following pages. Initial Setup Data marked with an \* should be changed from Initial Reference Data. (See pages 3 and 4 for Initial Bus Data Setup.)

No.	Title	Initial Reference Data (h)	Initial Setup Data (h)	Sub Title (Sub Item)	Initial Data (h)	Range of Data (h)	Function (Sub Address)
100	PRGBON4DL2ES1SF	FD	FD	PRGBON4 DL2 ES1 SF	0F 03 00 01	00 - 0F 00 - 03 00 - 01 00 - 01	PIC+R+G+B ON (b7 - b4) D COL (b3 - b2) EXT SW 0=Fix (b1) SHP F0 (b0)
101	BLKBTM	00	00		00	00 - 03	Picture (Contrast) Not used
102	SHU2PO	23	13*	<b>SHU</b> PO	<b>08</b> 03	<b>00 - 3F</b> 00 - 03	<b>SUB HUE (b7 - b2)</b> PRE/OVER SHOOT (b1 - b0)
103	SCL2CTI	3F	1B*	<b>SCL2</b> CTI	<b>0F</b> 03	<b>00 - 3F</b> 00 - 03	<b>SUB COLOR (b7 - b2)</b> CTI Level (b1 - b0)
104	Not used						
105	SSH2LTI	82	82	<b>SSH2</b> LTI	<b>20</b> 02	<b>00 - 3F</b> 00 - 03	<b>SUB SHARPNESS (b7 - b2)</b> LTI Level (b1 - b0)
106	RD2PTL	7C	70*	<b>RD2</b> PTL	<b>1F</b> 00	<b>00 - 3F</b> 00 - 03	<b>R DRIVE (b7 - b2)</b> PLIMIT Level (b1 - b0)
107	GD2ABLM	7F	73*	<b>GD2</b> ABLM	<b>1F</b> 03	<b>00 - 3F</b> 00 - 03	<b>G DRIVE (b7 - b2)</b> ABL MODE (b1 - b0)
108	BD2CTIM1	7C	70*	<b>BD2</b> CTIM1	<b>1F</b> 00	<b>00 - 3F</b> 00 - 01	<b>B DRIVE (b7 - b2)</b> CTI MODE (b1)
109	SBR2GAM	3E	2E*	<b>SBR2</b> GAM	<b>0F</b> 02	<b>00 - 3F</b> 00 - 03	<b>SUB BRIGHT (b7 - b2)</b> GAMMA (Except 1125i) (b1 - b0)
10A	RCT2LTIM1	7C	D4*	<b>RCT2</b> LTIM1	<b>1F</b> 00	<b>00 - 3F</b> 00 - 01	<b>R CUTOFF (b7 - b2)</b> LTI MODE (b1)
10B	GCT2DPL	7F	7D*	<b>GCT2</b> DPL	<b>1F</b> 03	<b>00 - 3F</b> 00 - 03	<b>G CUT OFF (b7 - b2)</b> DPIC Level (b1 - b0)
10C	BCT2DCT	7F	9D*	<b>BCT2</b> DCT	<b>1F</b> 03	<b>00 - 3F</b> 00 - 03	<b>B CUT OFF (b7 - b2)</b> DC Transit (b1 - b0)
10D	SCO4LR2L	77	77	<b>SCO4</b> LR2L	<b>05</b> 07	<b>00 - 0F</b> 00 - 0F	<b>SUB CONT (b7 - b4)</b> LRGB2 Level (b3 - b0)
10E	PABL4ABLT	F1	F1	PABL4 ABLT	0F 01	00 - 0F 00 - 0F	P ABL (b7 - b4) ABL Threshold (b3 - b0)
10F	CBOF2AW1AB	90	90	CBOF2 AW1 AB	24 00 00	00 - 3F 00 - 01 00 - 01	CB OFFSET (b7 - b2) AGING W (b1) AGING B (b0)
110	CROF2SYS	B0	B0	CROF2 SYS	2C 00	00 - 3F 00 - 03	CR OFFSET (b7 - b2) SYSTEM (b1 - b0)
111	YOF4VD2VF	0E	06*	YOF4 VD2 VF	00 03 02	00 - 0F 00 - 03 00 - 01	Y OFFSET (b7 - b4) VM Delay (b3 - b2) VM F0 (b1 - b0)
112	RYR4RYB	88	88	RYR4 RYB	08 08	00 - 0F 00 - 0F	R-Y / R (b7 - b4) R-Y / B (b3 - b0)
113	GYR4GYB	88	66*	GYR4 GYB	08 08	00 - 0F 00 - 0F	G-Y / R (b7 - b4) G-Y / B (b3 - b0)
114	VLM4FLC2FLS	38	F8*	VLM4 FLC2 FLS	0F 02 00	00 - 0F 00 - 03 00 - 01	VM Level (b7 - b4) FLCOL (b3 - b2) FLCOL SW (b1)
115	UBK4LBK	00	00	UBK4 LKB	00 00	00 - 0F 00 - 0F	UP BLK (b7 - b4) LO BLK (b3 - b0)
116	VS2VON1ED	6E	86*	<b>VS2</b> VON1 ED	<b>1B</b> 01 00	<b>00 - 3F</b> 00 - 01 00 - 01	<b>V SIZE (b7 - b2)</b> V ON 1=Fix (b1) EWDC 0=Fix (b0)
117	<b>VPS2</b>	<b>78</b>	<b>78</b>		<b>1E</b>	<b>00 - 3F</b>	<b>V POSITION (b7 - b2)</b>
118	VLIN4SCR	76	76	VLIN4 SCR	07 06	00 - 0F 00 - 0F	V LIN (b7 - b4) S CORRECTION (b3 - b0)
119	HSI2UUC	60	60	<b>HSI2</b> UUC	<b>18</b> 00	<b>00 - 3F</b> 00 - 03	<b>H SIZE (b7 - b2)</b> UP UCP (b1 - b0)
11A	PAP2LUP	B4	B4	<b>PAP2</b> LUP	<b>2D</b> 00	<b>00 - 3F</b> 00 - 03	<b>PIN AMP (b7 - b2)</b> LO UPC (b1 - b0)

# SERVICE ADJUSTMENTS (Cont.)

Table 1. ON-SCREEN SERVICE MENU (Continued)

No.	Title	Initial Reference Data (h)	Initial Setup Data (h)	Sub Title (Sub Item)	Initial Data (h)	Range of Data (h)	Function (Sub Address)
11B	UCP2UUG	A4	A4	UCP2	29	00 - 3F	UP CPIN (b7 - b2)
				UUG	00	00 - 03	UP UCG (b1 - b0)
11C	LCP2LUG	A0	A0	LCP2	28	00 - 3F	LO CPIN (b7 - b2)
				LUG	00	00 - 03	LO UCG (b1 - b0)
11D	PPH2UPO1VBS	81	79*	PPH2	20	00 - 3F	PIN PHASE (b7 - b2)
				UPO1	00	00 - 01	UP POL (b1)
				VBS	01	00 - 01	VLK SW (b0)
11E	HPO2CSH1NIN	58	60*	HPO2	16	00 - 3F	H POSITION (b7 - b2)
				CSH1	00	00 - 01	CLP SHIFT (b1)
				NIN	00	00 - 01	NON INTER (b0)
11F	ABO2RAM	85	85	ABO2	21	00 - 3F	AFC BOW (b7 - b2)
				RAM	01	00 - 03	RF AFC MODE (b1 - b0)
120	AAN2AGS1	84	84	AAN2	21	00 - 3F	AFC ANGLE (b7 - b2)
				AGS1	00	00 - 01	AGC SW (b1)
121	LBK2CPH	BC	BC	LBK2	2F	00 - 3F	LEFT BLK (b7 - b2)
				CPH	00	00 - 03	CLP PHASE (b1 - b0)
122	RGK2CGA1HSW	9D	9D	RBK2	27	00 - 3F	RIGHT BLK (b7 - b2)
				CGA1	00	00 - 01	CLP GATE (b1)
				HSW	01	00 - 01	HBLK SW (b0)
123	VAS2ZSW1JSW	00	00	VAS2	00	00 - 3F	V ASPECT (b7 - b2)
				ZSW1	00	00 - 01	"ZOOM SW, 0=Fix (b1)"
				JSW	00	00 - 01	JMP SW (b0)
124	VSR2VFQ	7D	7D	VSR2	1F	00 - 3F	V SCROLL (b7 - b2)
				VFQ	01	00 - 03	"VFREQ, 1=Fix (b1 - b0)"
125	UVL4LVL	00	00	UVL4	00	00 - 0F	UP VLIN (b7 - b4)
				LVL	00	00 - 0F	LO VLIN (b3 - b0)
126	VCP4HCP	49	37*	VCP4	04	00 - 0F	V COMP (b7 - b4)
				HCP	09	00 - 0F	H COMP (b3 - b0)
127	ATI3HVS2BOF1AOF	C0	C0	ATI3	18	00 - 1F	AKB TIM (b7 - b3)
				HVS2	00	00 - 01	HVBTM SW (b2)
				BOF1	00	00 - 01	BLK OFF (b1)
				AOF	00	00 - 01	AKB OFF (b0)
128	RF-SF0	01	01		01	00 - 01	RF SHP F0 (b0)
129	5I-SF0	01	01		01	00 - 01	525I SHP F0 (b0)
12A	5P-SF0	01	01		01	00 - 01	525P SHP F0 (b0)
12B	1I-SF0	01	01		01	00 - 01	1125I SHP F0 (b0)
12C	RF-CON	00	00		00	00 - FF	RF CONTRAST (DIF.)
12D	5I-CON	00	00		00	00 - FF	525I CONTRAST (DIF.)
12E	5P-CON	00	00		00	00 - FF	525P CONTRAST (DIF.)
12F	1I-CON	00	00		00	00 - FF	1125I CONTRAST (DIF.)
130	W-CON	00	00		00	00 - FF	16:9 CONTRAST (DIF.)
131	RF-HUE	FD	01*		FD	00 - FF	RF TINT (DIF.)
132	5I-HUE	01	04*		01	00 - FF	525I TINT (DIF.)
133	5P-HUE	02	FF*		02	00 - FF	525P TINT (DIF.)
134	1I-HUE	FE	01*		FE	00 - FF	1125I TINT (DIF.)
135	W-HUE	FF	FF		FF	00 - FF	16:9 TINT (DIF.)
136	136	00	00		00	00 - FF	RESERVE
137	RF-PRE	03	03		03	00 - 03	RF PRE/OVER (b1 - b0)
138	5I-PRE	03	03		03	00 - 03	525I PRE/OVER (b1 - b0)
139	5P-PRE	03	03		03	00 - 03	525P PRE/OVER (b1 - b0)
13A	1I-PRE	03	03		03	00 - 03	1125I PRE/OVER (b1 - b0)
13B	RF-COL	01	FE*		01	00 - FF	RF COLOR (DIF.)
13C	5I-COL	02	07*		02	00 - FF	525I COLOR (DIF.)
13D	5P-COL	0A	0A		0A	00 - FF	525P COLOR (DIF.)
13E	1I-COL	09	09		09	00 - FF	1125I COLOR (DIF.)
13F	W-COL	00	00		00	00 - FF	16:9 COLOR (DIF.)
140	140	00	00		00	00 - FF	RESERVE
141	RF-CLV	03	03		03	00 - 03	RF CTI LEVEL (b1 - b0)
142	5I-CLV	03	03		03	00 - 03	525I CTI LEVEL (b1 - b0)
143	5P-CLV	03	03		03	00 - 03	525P CTI LEVEL (b1 - b0)

No.	Title	Initial Reference Data (h)	Initial Setup Data (h)	Sub Title (Sub Item)	Initial Data (h)	Range of Data (h)	Function (Sub Address)
144	1I-CLV	03	03		03	00 - 03	1125I CTI LEVEL (b1 - b0)
145	RF-BRI	00	00		00	00 - FF	RF BRIGHT (DIF.)
146	5I-BRI	00	F0*		00	00 - FF	525I BRIGHT (DIF.)
147	5P-BRI	00	00		00	00 - FF	525P BRIGHT (DIF.)
148	1I-BRI	00	00		00	00 - FF	1125I BRIGHT (DIF.)
149	W-BRI	00	00		00	00 - FF	16:9 BRIGHT (DIF.)
14A	RF-SHP	00	10*		00	00 - FF	RF SHARPNESS (DIF.)
14B	5I-SHP	00	10*		00	00 - FF	525I SHARPNESS (DIF.)
14C	5P-SHP	00	04*		00	00 - FF	525P SHARPNESS (DIF.)
14D	1I-SHP	00	04*		00	00 - FF	1125I SHARPNESS (DIF.)
14E	W-SHP	00	00		00	00 - FF	16:9 SHARPNESS (DIF.)
14F	14F	00	00		00	00 - FF	RESERVE
150	RF-LLV	03	02*		03	00 - 03	RF LTI LEVEL (b1 - b0)
151	5I-LLV	03	02*		03	00 - 03	525I LTI LEVEL (b1 - b0)
152	5P-LLV	03	02*		03	00 - 03	525P LTI LEVEL (b1 - b0)
153	1I-LLV	02	02		02	00 - 03	1125I LTI LEVEL (b1 - b0)
154	RF-CMD	00	00		00	00 - 01	RF CTI MODE (b0)
155	5I-CMD	00	00		00	00 - 01	525I CTI MODE (b0)
156	5P-CMD	00	00		00	00 - 01	525P CTI MODE (b0)
157	1I-CMD	00	00		00	00 - 01	1125I CTI MODE (b0)
158	1I-GAM	02	02		02	00 - 03	1125I GAMMA (b1 - b0)
159	RF-CMD	00	00		00	00 - 01	RF LTI MODE (b0)
15A	5I-CMD	00	00		00	00 - 01	525I LTI MODE (b0)
15B	5P-CMD	00	00		00	00 - 01	525P LTI MODE (b0)
15C	1I-CMD	00	00		00	00 - 01	1125I LTI MODE (b0)
15D	RF-CB	00	00		00	00 - FF	RF CB OFFSET (DIF.)
15E	5I-CB	00	00		00	00 - FF	525I CB OFFSET (DIF.)
15F	5P-CB	F0	F0		F0	00 - FF	525P CB OFFSET (DIF.)
160	1I-CB	F0	F0		F0	00 - FF	1125I CB OFFSET (DIF.)
161	W-CB	00	00		00	00 - FF	16:9 CB OFFSET (DIF.)
162	RF-CR	00	00		00	00 - FF	RF CR OFFSET (DIF.)
163	5I-CR	00	00		00	00 - FF	525I CR OFFSET (DIF.)
164	5P-CR	F0	F0		F0	00 - FF	525P CR OFFSET (DIF.)
165	1I-CR	F0	F0		F0	00 - FF	1125I CR OFFSET (DIF.)
166	W-CR	00	00		00	00 - FF	16:9 CR OFFSET (DIF.)
167	RF-SYS	00	00		00	00 - 03	RF SYSTEM (b1 - b0)
168	5I-SYS	00	00		00	00 - 03	525I SYSTEM (b1 - b0)
169	5P-SYS	00	00		00	00 - 03	525P SYSTEM (b1 - b0)
16A	1I-SYS	01	01		01	00 - 03	1125I SYSTEM (b1 - b0)
16B	RF-VMD	03	01*		03	00 - 03	RF VM DELAY (b1 - b0)
16C	5I-VMD	03	01*		03	00 - 03	525I VM DELAY (b1 - b0)
16D	5P-VMD	03	01*		03	00 - 03	525P VM DELAY (b1 - b0)
16E	1I-VMD	03	00*		03	00 - 03	1125I VM DELAY (b1 - b0)
16F	RF-VMF	02	02		02	00 - 03	RF VM F0 (b1 - b0)
170	5I-VMF	02	02		02	00 - 03	525I VM F0 (b1 - b0)
171	5P-VMF	02	02		02	00 - 03	525P VM F0 (b1 - b0)
172	1I-VMF	02	02		02	00 - 03	1125I VM F0 (b1 - b0)
173	W-VMF	02	02		02	00 - FF	16:9 VM F0 (DIF.)
174	RF-RYR	08	08		08	00 - 0F	RF R-Y/R (b3 - b0)
175	5I-RYR	08	08		08	00 - 0F	525I R-Y/R (b3 - b0)
176	5P-RYR	08	08		08	00 - 0F	525P R-Y/R (b3 - b0)
177	1I-RYR	08	08		08	00 - 0F	1125I R-Y/R (b3 - b0)
178	RF-RYB	08	08		08	00 - 0F	RF R-Y/B (b3 - b0)
179	5I-RYB	08	08		08	00 - 0F	525I R-Y/B (b3 - b0)
17A	5P-RYB	08	08		08	00 - 0F	525P R-Y/B (b3 - b0)
17B	1I-RYB	08	08		08	00 - 0F	1125I R-Y/B (b3 - b0)
17C	RF-GYR	08	08		08	00 - 0F	RF G-Y/R (b3 - b0)
17D	5I-GYR	08	08		08	00 - 0F	525I G-Y/R (b3 - b0)
17E	5P-GYR	08	08		08	00 - 0F	525P G-Y/R (b3 - b0)
17F	1I-GYR	08	08		08	00 - 0F	1125I G-Y/R (b3 - b0)
180	RF-GYB	08	08		08	00 - 0F	RF G-Y/B (b3 - b0)
181	5I-GYB	08	08		08	00 - 0F	525I G-Y/B (b3 - b0)
182	5P-GYB	08	08		08	00 - 0F	525P G-Y/B (b3 - b0)
183	1I-GYB	08	08		08	00 - 0F	1125I G-Y/B (b3 - b0)

# SERVICE ADJUSTMENTS (Cont.)

Table 1. ON-SCREEN SERVICE MENU (Continued)

No.	Title	Initial Reference Data (h)	Initial Setup Data (h)	Sub Title (Sub Item)	Initial Data (h)	Range of Data (h)	Function (Sub Address)
184	RF-VLV	03	0F*		03	00 - 0F	RF VM LEVEL (b3 - b0)
185	5I-VLV	03	0F*		03	00 - 0F	525I VM LEVEL (b3 - b0)
186	5P-VLV	03	0F*		03	00 - 0F	525P VM LEVEL (b3 - b0)
187	1I-VLV	03	0F*		03	00 - 0F	1125I VM LEVEL (b3 - b0)
188	W-VLV	00	00		00	00 - FF	16:9 VM LEVEL (DIF.)
189	189	00	00		00	00 - FF	RESERVE
↓	↓	↓	↓		↓	↓	↓
18F	18F	00	00		00	00 - FF	RESERVE
190	5IWUBK	0A	0A		0A	00 - FF	VIDEO1-3, 525I, 16:9 UP BLK (DIF.)
191	5IWL BK	0D	0D		0D	00 - FF	VIDEO1-3, 525I, 16:9 LO BLK (DIF.)
192	5IWVS	1F	1F		1F	00 - FF	VIDEO1-3, 525I, 16:9 V SIZE (DIF.)
193	5I WVPS	00	00		00	00 - FF	VIDEO1-3, 525I, 16:9 V POSITION (DIF.)
194	5IWUUC	00	00		00	00 - FF	VIDEO1-3, 525I, 16:9 UP UCP (DIF.)
195	5IWPAP	FF	FF		FF	00 - FF	VIDEO1-3, 525I, 16:9 PIN AMP (DIF.)
196	5IWLUP	00	00		00	00 - FF	VIDEO1-3, 525I, 16:9 LO UCP (DIF.)
197	5IWUCP	00	00		00	00 - FF	VIDEO1-3, 525I, 16:9 UP CPIN (DIF.)
198	5IWUUG	00	00		00	00 - FF	VIDEO1-3, 525I, 16:9 UP UCG (DIF.)
199	5IWLCP	00	00		00	00 - FF	VIDEO1-3, 525I, 16:9 LO CPIN (DIF.)
19A	5IWLUG	00	00		00	00 - FF	VIDEO1-3, 525I, 16:9 LO UCG (DIF.)
19B	5IWPPH	00	00		00	00 - FF	VIDEO1-3, 525I, 16:9 PIN PHASE (DIF.)
19C	5IWUPO	00	00		00	00 - 01	VIDEO1-3, 525I, 16:9 UC POL (b0)
19D	5I WVBS	01	01		01	00 - 01	VIDEO1-3, 525I, 16:9 VBLK SW (b0)
19E	5IWABO	00	00		00	00 - FF	VIDEO1-3, 525I, 16:9 AFC BOW (DIF.)
19F	5IWAAN	00	00		00	00 - FF	VIDEO1-3, 525I, 16:9 AFC ANGLE (DIF.)
1A0	5IWJSW	01	01		01	00 - 01	VIDEO1-3, 525I, 16:9 JMP SW (b0)
1A1	1A1	00	00		00	00 - FF	VIDEO1-3, 525I, 16:9 RESERVE
1A2	1A2	00	00		00	00 - FF	VIDEO1-3, 525I, 16:9 RESERVE
1A3	1A3	00	00		00	00 - FF	VIDEO1-3, 525I, 16:9 RESERVE
1A4	1A4	00	00		00	00 - FF	VIDEO1-3, 525I, 16:9 RESERVE
1A5	1A5	00	00		00	00 - FF	VIDEO1-3, 525I, 16:9 RESERVE
1A6	5PNUBK	00	00		00	00 - FF	VIDEO3, 525P, 4:3 UP BLK (DIF.)
1A7	5PNLBK	00	00		00	00 - FF	VIDEO3, 525P, 4:3 LO BLK (DIF.)
1A8	5PNVS	00	00		00	00 - FF	VIDEO3, 525P, 4:3 V SIZE (DIF.)
1A9	5PNVPS	00	00		00	00 - FF	VIDEO3, 525P, 4:3 V POSITION (DIF.)
1AA	5PNHSI	00	FE*		00	00 - FF	VIDEO3, 525P, 4:3 H SIZE (DIF.)
1AB	5PNHPO	00	FB*		00	00 - FF	VIDEO3, 525P, 4:3 H POSITION (DIF.)
1AC	5PNIN	00	00		00	00 - 01	VIDEO3, 525P, 4:3 NON INTER (b0)
1AD	5PNLBK	00	00		00	00 - FF	VIDEO3, 525P, 4:3 LEFT BLK (DIF.)
1AE	5PNRBK	00	00		00	00 - FF	VIDEO3, 525P, 4:3 RIGHT BLK (DIF.)
1AF	1AF	00	00		00	00 - FF	VIDEO3, 525P, 4:3 RESERVE
1B0	1B0	00	00		00	00 - FF	VIDEO3, 525P, 4:3 RESERVE
1B1	1B1	00	00		00	00 - FF	VIDEO3, 525P, 4:3 RESERVE
1B2	1INUBK	00	00		00	00 - FF	VIDEO3, 1125I, 4:3 UP BLK (DIF.)
1B3	1INLBK	00	00		00	00 - FF	VIDEO3, 1125I, 4:3 LO BLK (DIF.)
1B4	1INVS	F6	F6		F6	00 - FF	VIDEO3, 1125I, 4:3 V SIZE (DIF.)
1B5	1INVPS	FD	FD		FD	00 - FF	VIDEO3, 1125I, 4:3 V POSITION (DIF.)
1B6	1INVLI	00	00		00	00 - FF	VIDEO3, 1125I, 4:3 V LIN (DIF.)
1B7	1INSCR	00	00		00	00 - FF	VIDEO3, 1125I, 4:3 S CORRECTION (DIF.)
1B8	1INH SI	04	04		04	00 - FF	VIDEO3, 1125I, 4:3 H SIZE (DIF.)
1B9	1INUUC	00	00		00	00 - FF	VIDEO3, 1125I, 4:3 UP UOC (DIF.)
1BA	1INPAP	08	08		08	00 - FF	VIDEO3, 1125I, 4:3 PIN AMP (DIF.)
1BB	1INLUP	00	00		00	00 - FF	VIDEO3, 1125I, 4:3 LO UCP (DIF.)
1BC	1INU CP	00	00		00	00 - FF	VIDEO3, 1125I, 4:3 UP CPIN (DIF.)
1BD	1INUUG	00	00		00	00 - FF	VIDEO3, 1125I, 4:3 UP UCG (DIF.)
1BE	1INLCP	00	00		00	00 - FF	VIDEO3, 1125I, 4:3 LO CPIN (DIF.)
1BF	1INLUG	00	00		00	00 - FF	VIDEO3, 1125I, 4:3 LO UCG (DIF.)
1C0	1INPPH	FD	FD		FD	00 - FF	VIDEO3, 1125I, 4:3 PIN PHASE (DIF.)
1C1	1INUPO	00	00		00	00 - 01	VIDEO3, 1125I, 4:3 UC POL (b0)
1C2	1INHPO	13	12*		13	00 - FF	VIDEO3, 1125I, 4:3 H POSITION (DIF.)
1C3	1INCSH	00	00		00	00 - 01	VIDEO3, 1125I, 4:3 CLP SHIFT (b0)



No.	Title	Initial Reference Data (h)	Initial Setup Data (h)	Sub Title (Sub Item)	Initial Data (h)	Range of Data (h)	Function (Sub Address)
1C4	1INNIN	00	00		00	00 - 01	VIDEO3, 1125I,4:3 NON INTER (b0)
1C5	1INABO	00	00		00	00 - FF	VIDEO3, 1125I,4:3 AFC BOW (DIF.)
1C6	1INAAN	00	00		00	00 - FF	VIDEO3, 1125I,4:3 AFC ANGLE (DIF.)
1C7	1INLBK	00	00		00	00 - FF	VIDEO3, 1125I,4:3 LEFT BLK (DIF.)
1C8	1INCPH	00	00		00	00 - FF	VIDEO3, 1125I,4:3 CLP PHASE (DIF.)
1C9	1INRBK	F0	F0		F0	00 - FF	VIDEO3, 1125I,4:3 RIGHT BLK (DIF.)
1CA	1INCGA	00	00		00	00 - 01	VIDEO3, 1125I,4:3 CLP GATE (b0)
1CB	1INVAS	00	00		00	00 - FF	VIDEO3, 1125I,4:3 V ASPECT (DIF.)
1CC	1INVSR	00	00		00	00 - FF	VIDEO3, 1125I,4:3 V SCROLL (DIF.)
1CD	1INUVL	00	00		00	00 - FF	VIDEO3, 1125I,4:3 LO VLIN (DIF.)
1CE	1INLVL	00	00		00	00 - FF	VIDEO3, 1125I,4:3 LO VLIN (DIF.)
1CF	1INATI	00	00		00	00 - FF	VIDEO3, 1125I,4:3 AKB TIM (DIF.)
1D0	1INHVS	00	00		00	00 - 01	VIDEO3, 1125I,4:3 HVBTM SW (b0)
1D1	1IWUBK	07	07		07	00 - FF	VIDEO3, 1125I,16:9 UP BLK (DIF.)
1D2	1IWL BK	0F	0F		0F	00 - FF	VIDEO3, 1125I,16:9 LO BLK (DIF.)
1D3	1IWVS	20	20		20	00 - FF	VIDEO3, 1125I,16:9 V SIZE (DIF.)
1D4	1I WVPS	00	00		00	00 - FF	VIDEO3, 1125I,16:9 V POSITION (DIF.)
1D5	1IWUUC	00	00		00	00 - FF	VIDEO3, 1125I,16:9 UP UCP (DIF.)
1D6	1IWPAP	00	00		00	00 - FF	VIDEO3, 1125I,16:9 PIN AMP (DIF.)
1D7	1IWLUP	00	00		00	00 - FF	VIDEO3, 1125I,16:9 LO UCP (DIF.)
1D8	1IWUCP	00	00		00	00 - FF	VIDEO3, 1125I,16:9 UP CPIN (DIF.)
1D9	1IWUUG	00	00		00	00 - FF	VIDEO3, 1125I,16:9 UP UCG (DIF.)
1DA	1IWLCP	00	00		00	00 - FF	VIDEO3, 1125I,16:9 LO CPIN (DIF.)
1DB	1IWLUG	00	00		00	00 - FF	VIDEO3, 1125I,16:9 LO UCG (DIF.)
1DC	1IWPPH	00	00		00	00 - FF	VIDEO3, 1125I,16:9 PIN PHASE (DIF.)
1DD	1IWUPO	00	00		00	00 - 01	VIDEO3, 1125I,16:9 UC POL (b0)
1DE	1IWABO	02	02		02	00 - FF	VIDEO3, 1125I,16:9 AFC BOW (DIF.)
1DF	1IWAAN	00	00		00	00 - FF	VIDEO3, 1125I,16:9 AFC ANGLE (DIF.)
1E0	EX-AFC	03	03		03	00 - 03	EXT (AV1/AV2) AFC MODE (b1 - b0)
1E1	CP-AFC	03	03		03	00 - 03	COMPONENT (AV3) AFC MODE (b1 - b0)
1E2	1E2	00	00		00	00 - FF	RESERVE
1E3	1E3	00	00		00	00 - FF	RESERVE
1E4	1E4	00	00		00	00 - FF	RESERVE
1E5	5PWUBK	0B	0B		0B	00 - FF	VIDEO3, 525P,16:9 UP BLK (DIF.)
1E6	5PWL BK	0E	0E		0E	00 - FF	VIDEO3, 525P,16:9 LO BLK (DIF.)
1E7	5PWVS	21	21		21	00 - FF	VIDEO3, 525P,16:9 V SIZE (DIF.)
1E8	5PWVPS	FF	FF		FF	00 - FF	VIDEO3, 525P,16:9 V POSITION (DIF.)
1E9	1E9	00	00		00	00 - FF	VIDEO3, 525P,16:9 RESERVE
040	HU2DO1CY	83	83	HU2 DO1 CY	20 01 01	00 - 3F 00 - 01 00 - 01	HUE (b7 - b2) DPIC OFF (b1) CV/YC (b0)
041	COL2RHM1CAN	52	52	COL2 RHM1 CAN	14 01 00	00 - 3F 00 - 01 00 - 01	COLOR (b7 - b2) RF, HMASK (b1) CANAL (b0)
042	SHA4SCO	47	67*	SHA4 SCO	04 07	00 - 0F 00 - 0F	SHARPNESS (b7 - b4) SUB CONTRAST (b3 - b0)
043	SHU4SCL	77	77	SHU4 SCL	07 07	00 - 0F 00 - 0F	SUB HUE (b7 - b4) SUB COLOR (b3 - b0)
044	CAJ4RAF2TRO1TOO	78	78	CAJ4 RAF2 TRO1 TOO	07 02 00 00	00 - 0F 00 - 03 00 - 01 00 - 01	C TRAP ADJ (b7 - b4) AFC (b3 - b2) TRAP ON (b1) TOT ON (b0)
045	YD3SF2FO1CM2	2A	2A	YD3 SF2 FO1 CM2	05 00 01 00	00 - 1F 00 - 01 00 - 01 00 - 01	Y DRIVE (b7 - b3) SHP-F0 (b2) FSC OUT (b1) CD MODE2 (b0)
046	UPD4VPD	68	68	UPD4 VPD	06 08	00 - 0F 00 - 0F	U PED (b7 - b4) V PED (b3 - b0)
047	U2PD4V2PD	00	00	U2PD4 2PD	00 00	00 - 0F 00 - 0F	U2 PED (b7 - b4) V2 PED (b3 - b0)
048	Y2D3DCT	00	00	Y2D3 DCT	00 00	00 - 1F 00 - 07	Y2 DRIVE (b7 - b3) DC TRAN (b2 - b0)

# SERVICE ADJUSTMENTS (Cont.)

Table 1. ON-SCREEN SERVICE MENU (Continued)

No.	Title	Initial Reference Data (h)	Initial Setup Data (h)	Sub Title (Sub Item)	Initial Data (h)	Range of Data (h)	Function (Sub Address)
049	U2D3PRO1AOF	00	00	U2D3 PRO1 AOF	00 00 00	00 - 1F 00 - 03 00 - 01	U2 DRIVE (b7 - b3) PRE OVER (b2 - b1) ABL OFF, 0=Fix (b0)
04A	V2D3ABLC1ABL	00	00	V2D3 ABLC1 ABL	00 00 00	00 - 1F 00 - 03 00 - 01	V2 DRIVE (b7 - b3) ABL CENTER, 0=Fix (b2 - b1) ABL, 0=Fix (b0)
04B	CS6XP4VF2DL	02	02	CS6 XP4 VF2 DL	00 00 00 02	00 - 03 00 - 03 00 - 03 00 - 03	COLOR SYSTEM (b7 - b6) X'TAL PIN (b5 - b4) V FREQ (b3 - b2) DELAY (b1 - b0)
04C	CL6SB4SB2EC1	01	01	CL6 SB4 SB2 EC1	00 00 00 01	00 - 03 00 - 03 00 - 03 00 - 03	COLOR LOOP, 0=Fix (b7 - b6) SCP BGF, 0=Fix (b5 - b4) SCP BGR, 0=Fix (b3 - b2) EXT COLOR, 1=Fix (b1 - b0)
04D	EXAFC	00	00		00	00 - FF	EXTERNAL INPUT(AV1/AV2) AFC
04E	EXCAFC	01	01		01	00 - FF	EXTERNAL COMPONENT(AV3) AFC
04F	04F	00	00		00	00 - FF	RESERVE
050	IS6MO4VF3S12S2	86	86	IS6 MO4 VF3 S12 S2	02 00 00 01 01	00 - 03 00 - 03 00 - 01 00 - 01 00 - 01	INPUT SEL (b7 - b6) MAT OUT (1125I) (b5 - b4) V FREQ (b3) SELSTB 1 (b2) SELSTB 2 (b1)
051	FS6VT4HW2HS1HT	32	30*	FS6 VT4 HW2 HS1 HT	00 03 00 00 00	00 - 03 00 - 03 00 - 03 00 - 01 00 - 01	FIX SYNC (b7 - b6) V TC (b5 - b4) H WIDTH (b3 - b2) HSEP SEL (b1) HD TC (b0)
052	HS7HM6MA5SL3CS2G	01	01	HS7 HM6 MA5 SL3 CS2 G	00 00 00 00 00 01	00 - 01 00 - 01 00 - 01 00 - 01 00 - 01 00 - 03	HYSW (b7) HSMASK (b6) MACRO (b5) SELDUM (b3) CLKSEL (b2) GAINSEL (b1 - b0)
053	CBG4CRG	00	00	CBG4 CRG	00 00	00 - 0F 00 - 0F	CB GAIN (b7 - b4) CR GAIN (b3 - b0)
054	YG4HF2	04	04	YG4 HF2	00 01	00 - 0F 00 - 03	Y GAIN (b7 - b4) H FERQ (b3 - b2)
055	055	00	00		00	00 - FF	RESERVE
056	5PVTC	03	03		03	00 - 03	525P V-TC SOURCE (b1 - b0)
057	1IVTC	03	03		03	00 - 03	1125I V-TC SOURCE (b1 - b0)
058	5PHDTC	00	00		00	00 - 01	525P HD-TC (b0)
059	1IHDTC	00	00		00	00 - 01	1125I HD-TC (b0)
05A	05A	00	00		00	00 - FF	RESERVE
↓	↓	↓	↓		↓	↓	↓
07F	07F	00	00		00	00 - FF	NOT AVAILABLE
<b>080</b>	<b>ATT</b>	<b>0A</b>	<b>07*</b>		<b>0A</b>	<b>00 - 0F</b>	<b>AUDIO INPUT LEVEL (0 - 15)</b>
<b>081</b>	<b>WDB</b>	<b>20</b>	<b>20</b>		<b>20</b>	<b>00 - 3F</b>	<b>AUDIO LOW SEPARATION (0 - 63)</b>
<b>082</b>	<b>SPC</b>	<b>20</b>	<b>20</b>		<b>20</b>	<b>00 - 3F</b>	<b>AUDIO HIGH SEPARATION (0 - 64)</b>
083	SCO	00	00		00	00 - FF	SUB COLOR (NOT USED)
↓	↓	↓	↓		↓	↓	↓
086	SSH	00	00		00	00 - FF	SUB SHARP (NOT USED)
087	OP1	00	00		00	00 - FF	OPTION 1 DATA
088	OP2	10	10		10	00 - FF	OPTION 2 DATA
089	PUV	18	18		18	00 - FF	PIP V POSITION UP (0 - 255)
08A	PDV	93	93		93	00 - FF	PIP V POSITION LO (0 - 255)
08B	PLH	0A	12*		12	00 - FF	PIP H POSITION LEFT (0 - 255)
08C	PRH	65	70*		65	00 - FF	PIP H POSITION RIGHT (0 - 255)
08D	PCN	34	40*		40	00 - 7F	PIP (SUB) Y OUT (0 - 127)
08E	PBS	0F	0F		0F	00 - 3F	PIP (VCXO)BGP PHASE (0 - 63)
08F	PCO	28	40*		28	00 - 7F	PIP COLOR (0 - 127)

No.	Title	Initial Reference Data (h)	Initial Setup Data (h)	Sub Title (Sub Item)	Initial Data (h)	Range of Data (h)	Function (Sub Address)
090	PTI	28	3A*		28	00 - 3F	PIP TINT (0 - 63)
<b>091</b>	<b>OSD</b>	<b>03</b>	<b>06*</b>		<b>06</b>	<b>00 - 3F</b>	<b>OSD H POSITION (0 - 63)</b>
092	SBO	05	05		05	00 - FF	SUB BRIGHT OFFSET (0 - 255)
093	VMT	48	48		48	00 - FF	VIDEO MUTE TIME
094	AKB	30	30		30	00 - FF	AKB DETECTING TIME
095	CAM	01	01		01	00 - 01	CINEMA AUTO/MANUAL 1=AUTO
096	IOS	FC	FA*		FC	00 - FF	VIDEO3-1080I H POSITION (DIF.)
097	097	00	00		00	00 - FF	RESERVE
-	FACTORY	-	-		-	-	Factory Menu
-	<b>RBDRIIVE</b>	-	-		-	-	<b>R / B Drive Level Adjustment Menu</b>
-	<b>SCREEN</b>	-	-		-	-	<b>Screen Adjustment Menu</b>
098	3DYC00	1F	1F		1F	00 - FF	3D Y/C SEPARATION DATA 01
099	3DYC01	00	00		00	00 - FF	3D Y/C SEPARATION DATA 02
09A	3DYC02	81	81		81	00 - FF	3D Y/C SEPARATION DATA 03
09B	3DYC03	A4	A4		A4	00 - FF	3D Y/C SEPARATION DATA 04
09C	3DYC04	29	29		29	00 - FF	3D Y/C SEPARATION DATA 05
09D	3DYC05	36	36		36	00 - FF	3D Y/C SEPARATION DATA 06
09E	3DYC06	99	99		99	00 - FF	3D Y/C SEPARATION DATA 07
09F	3DYC07	15	15		15	00 - FF	3D Y/C SEPARATION DATA 08
0A0	3DYC08	56	56		56	00 - FF	3D Y/C SEPARATION DATA 09
0A1	3DYC09	48	48		48	00 - FF	3D Y/C SEPARATION DATA 10
0A2	3DYC0A	52	00*		52	00 - FF	3D Y/C SEPARATION DATA 11
0A3	3DYC0B	3A	3A		3A	00 - FF	3D Y/C SEPARATION DATA 12
0A4	3DYC0C	00	00		00	00 - FF	3D Y/C SEPARATION DATA 13
0A5	3DYC0D	25	25		25	00 - FF	3D Y/C SEPARATION DATA 14
0A6	3DYC0E	08	08		08	00 - FF	3D Y/C SEPARATION DATA 15
0A7	3DYC0F	44	44		44	00 - FF	3D Y/C SEPARATION DATA 16
0A8	3DYC10	50	50		50	00 - FF	3D Y/C SEPARATION DATA 17
0A9	3DYC11	08	08		08	00 - FF	3D Y/C SEPARATION DATA 18
0AA	3DYC12	93	93		93	00 - FF	3D Y/C SEPARATION DATA 19
0AB	3DYC13	C3	C3		C3	00 - FF	3D Y/C SEPARATION DATA 20
0AC	3DYC14	53	53		53	00 - FF	3D Y/C SEPARATION DATA 21
0AD	3DYC15	A0	A0		A0	00 - FF	3D Y/C SEPARATION DATA 22
0AE	3DYC16	00	00		00	00 - FF	3D Y/C SEPARATION DATA 23
0AF	3DYC17	08	08		08	00 - FF	3D Y/C SEPARATION DATA 24
0B0	R00	00	00		00	00 - FF	DEBUG DATA
↓	↓	↓	↓		↓	↓	↓
0F8	R48	00	00		00	00 - FF	DEBUG DATA

## PROGRAM CODES

The microprocessor used in this model is a multi-purpose type and is used in several different models. To ensure proper operation and the correct features for your particular model, the program codes must be correct.

### Note 1. Option Data 1 (NO. 087 OP1).

Is not used in this model.

**Note 2. Option Data 2 (NO. 088 OP2) should be Hexadecimal 10 (00010000 binary).** If this program code is wrong the TV will not operate properly.

BIT	FUNCTION	DATA	
		0	1
0	NOT USED	-	-
1	NOT USED	-	-
2	NOT USED	-	-
3	NOT USED	-	-
4	PIP	NONE	YES
5	NOT USED		-
6	NOT USED	-	-
7	V-GUIDE	YES	NONE

# SERVICE ADJUSTMENTS (Continued)

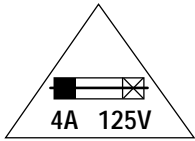
## ANTENNA CONNECTIONS

This receiver is designed for UHF/VHF reception. A 75 ohm terminal is provided for UHF and VHF receptions. When connecting a CATV antenna system, connect the 75 ohm coaxial cable directly to the 75 ohm terminal. For 300 ohm VHF antenna, use an adapter (not included with the TV set).

## CIRCUIT PROTECTION

Fuse F601 (4A) is included in the AC line. This fuse must be replaced with the proper fuse (see Parts List).

### CAUTION



**FOR CONTINUED PROTECTION AGAINST A RISK OF FIRE, REPLACE ONLY WITH THE SAME TYPE 4A, 125V FUSE.**

**ATTENTION : POUR MAINTENIR LA PROTECTION CONTRE LES RISQUES D' INCENDIE UTILISER UN FUSIBLE DE RECHANGE DE MEME TYPE 4A, 125V.**

## +B VOLTAGE CHECK

1. Connect Voltmeter + lead to TJ1 (130.5V / 134.5V) and – lead to ground.
2. Connect receiver to AC 120V line.
3. Tune receiver to an active channel as below.
  - (a) 480I
  - (b) 1080I
4. Voltage must measure as below range.
  - (a) 129.0V - 132.0V (480I Signal)
  - (b) 133.0V - 136.0V (1080I Signal)

If the voltage is out of range, the power circuit must be checked. No +B adjustment is provided on this chassis.

Note: Voltage of K6A 1 pin (HVSW) becomes as below for switching.

- (a) 4.8V (480I Signal)
- (b) 0V (1080I Signal)

## HORIZONTAL CENTERING ADJUSTMENT

1. Tune receiver to an active channel.
2. Check that picture is in the horizontal center of TV screen. If picture is not centered horizontally, perform steps 3 - 6.
3. Turn off the receiver and disconnect the AC power cord. (120V AC line)
4. While pressing the MENU key, reconnect the AC power cord. The Service Menu display will now appear.
5. Select NO. 11E (HPO2: Horizontal Position, Bit 7 - 2) with ▲ or ▼ key.
6. Adjust the data with numeric key for horizontal center. To turn off the Service Menu display, press the MENU key.

## HORIZONTAL WIDTH ADJUSTMENT

1. Tune receiver to an active channel.
2. Check the picture for proper width. If width is not correct, perform steps 3 - 6.
3. Turn off the receiver and disconnect the AC power cord.
4. While pressing the MENU key, reconnect the AC power cord. The Service Menu display will now appear.
5. Select NO. 119 (HSI2: Horizontal Size, Bit 7 - 2) with ▲ or ▼ key.
6. Adjust the data with numeric key for proper width. To turn off the Service Menu display, press the MENU key.

## VERTICAL SIZE ADJUSTMENT

1. Tune receiver to an active channel.
2. Check the vertical size of the picture. If the vertical size is too large or small, perform steps 3 - 6.
3. Turn off the receiver and disconnect the AC power cord.
4. While pressing the MENU key, reconnect the AC power cord. The Service Menu display will now appear.
5. Select NO. 116 (VS2: Vertical Size, Bit 7 - 2) with ▲ or ▼ key.
6. Adjust the data with + or – key for full scan. To turn off the Service Menu display, press the MENU key.

## VERTICAL CENTERING ADJUSTMENT

1. Tune receiver to an active channel.
2. Check that picture is in the vertical center of TV screen. If picture is not centered vertically, perform steps 3 - 6.
3. Turn off the receiver and disconnect the AC power cord.
4. While pressing the MENU key, reconnect the AC power cord. The Service Menu display will now appear.
5. Select NO. 117 (VPS2: Vertical Position) with ▲ or ▼ key.
6. Adjust the data with numeric key for vertical center. To turn off the Service Menu display, press the MENU key.

## GRAYSCALE ADJUSTMENT

1. Connect a color-bar generator to the antenna terminals.
2. Switch the generator to the white pattern.
3. Set the picture controls to the Sports level or Reset (use MENU key and ▲ or ▼ key or RESET key).
4. Turn off the receiver and disconnect the AC power cord (120V AC line).
5. While pressing the MENU key, reconnect the AC power cord. The Service Menu display will now appear.
6. Select NO. 106 RD2 (Red Drive), NO. 107 GD2 (Green Drive), and NO. 108 BD2 (Blue Drive) with ▲ or ▼ key and set data to "1F" (Bit 7 - 2: 011111) with numeric (7 - 2) key.
7. Select NO. 10A RCT2 (Red Drive), NO. 10B GCT2 (Green Drive), and NO. 10C BCT2 (Blue Drive) with ▲ or ▼ key and set data to "1F" (Bit 7 - 2: 011111) with numeric (7 - 2) key.
8. Set NO. 109 SBR2 (Sub Brightness) data to "0F" (Bit 7 - 2: 001111) and NO. 105 SSH2 (Sub Sharpness) data to "20" (Bit 7 - 2: 100000).

## Screen Adjustment

9. Connect oscilloscope probe (at least 50:1) to TP47G and ground lead to TE47 on the CRT socket PWB.
10. Select "Screen Adjustment" Menu (between NO. 097 and 098) with ▲ or ▼ key. (Black Picture)
11. Adjust Screen Control (T402) to obtain 15 Vp-p from black to white level. (See Figure 2.)

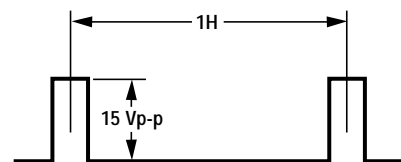


Figure 2.

### Drive Level Adjustment

12. Select "Drive Level Adjustment" Menu (between NO. 097 and NO. 098) with ▲ or ▼ key. The Menu display will appear.
13. Adjust Red and Blue Drive Levels alternately with 1, 3, 7, or 9 key to produce normal black and white picture in highlight areas. The Drive Level adjustment data will be written in the Service Menu No. 106 and 108 automatically. (See Figure 3.)



Figure 3. Remote Control Number keys' functions in Service Menu "Drive Level Adjustment"

14. Check for proper grayscale at all brightness levels.
- Note: If Grayscale Adjustment is made after picture tube replacement, check Brightness Adjustment.

### BRIGHTNESS LEVEL ADJUSTMENT

Note: Grayscale Adjustment and High Voltage Check must be completed before attempting Brightness Level Adjustment.

1. Connect a color-bar generator to the antenna terminals.
2. Switch the generator to the 15 IRE flat pattern.
3. Reset the picture controls to the Sports level.
4. Connect voltmeter (high impedance) + lead to terminal TP51 and - lead to terminal TP50 on P/D board. Set voltmeter for 1.5V ~ 3V range.
5. Turn off the receiver and disconnect the AC power cord.
6. While pressing the MENU key, reconnect the AC power cord. The Service Menu display will now appear.
7. Select NO. 109 (SBR2: Sub Brightness, Bit 7 - 2) with ▲ or ▼ key.
8. Adjust the data with numeric keys for 30mVDC.
9. Press the MENU key to turn off the Service Menu display.
10. Check brightness level on every active channel, readjust (repeat steps 5 ~ 9), if necessary.

Note: Do not set to excessive brightness level, otherwise the contrast level will be suppressed.

### SUB CONTRAST ADJUSTMENT

1. Connect a color-bar generator to the antenna terminals.
2. Switch the generator to the crosshatch pattern.
3. Connect oscilloscope probe (at least 50:1) to TP47G and ground lead to TE47 on the CRT socket PWB.
4. Turn off the receiver and disconnect the AC power cord.
5. While pressing the MENU key, reconnect the AC power cord. The Service Menu display will now appear.
6. Select NO. 10D (SCO4: Sub Contrast, Bit 7 - 4) with ▲ or ▼ key.
7. Set the data with numeric key to "3E" (Bit 7 - 2:111110).

8. Select NO. 10D (SCO4: Sub Contrast, Bit 7 - 4) with ▲ or ▼ key.
9. Set the data with numeric keys 4 - 7 for 100Vp-p.
10. Reset brightness level to previous data (repeat steps 6 - 7). To turn off the Service Menu display, press the MENU key.

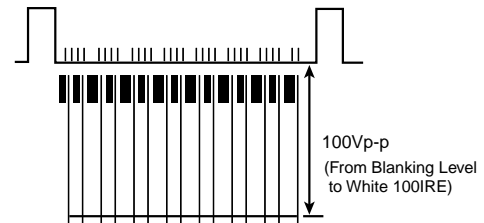


Figure 4. Sub Contrast

### SUB COLOR AND SUB HUE ADJUSTMENT

#### Sub Color

1. Connect a color-bar generator to the antenna terminals.
2. Switch the generator to the color-bar (NTSC) pattern.
3. Connect oscilloscope probe (at least 50:1) to TP47G and ground lead to TE47 on the CRT socket PWB.
4. Turn off the receiver and disconnect the AC power cord.
5. While pressing the MENU key, reconnect the AC power cord. The Service Menu display will now appear.
6. Select NO. 103 (SCL2: Sub Color, Bit 7 - 2) with ▲ or ▼ key.
7. Set the data with numeric keys 2 - 7 for waveform shown in Figure 5.

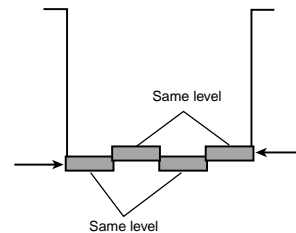


Figure 5. Sub Color

#### Sub Hue (Tint)

8. Select NO. 102 (SHU2: Sub HUE, Bit 7 - 2) with ▲ or ▼ key.
9. Set the data with numeric keys 7 - 2 for waveform shown in Figure 6. (Flat Waveform) To turn off the Service Menu display, press the MENU key.

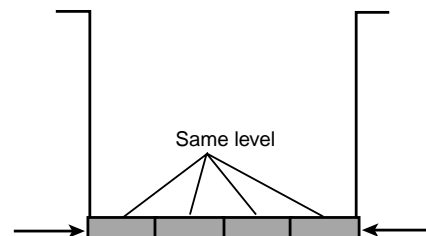


Figure 6. Sub Hue

# SERVICE ADJUSTMENTS (Continued)

## HIGH VOLTAGE HOLD-DOWN TEST

Every time the receiver is serviced, the HIGH VOLTAGE HOLD-DOWN circuit must be tested for proper operation by following these steps:

1. Connect receiver to 120V AC line. Tune receiver to active channel. Reset the picture controls to the Sports level.
2. Check that the voltage measured between TP7 and TE7 (ground side) is within 18.5 VDC to 22 VDC. If the voltage is out of this range, the Hold-Down Circuit must be checked.
3. Connect a DC Voltage supply to TP7 and TE7 through a 100 ohm 1/4W resistor. Adjust the DC voltage to 23 VDC. The receiver should shut down, losing raster and sound. Then the receiver should turn off automatically. This reaction indicates that the Hold-Down circuit is functioning properly. If the receiver does not shutdown, a malfunction is indicated and its cause **must** be found and corrected.
4. To obtain picture again, remove the DC Supply and wait a few minutes. Now turn on the receiver.

## HIGH VOLTAGE CHECK

Note: +B (+130V) Voltage Check and Grayscale Adjustment must be completed before attempting High Voltage Check.

1. Connect high voltage voltmeter – lead to ground, and connect + lead to anode of picture tube.
2. Tune receiver to an active channel and confirm TV is operating properly.
3. Eliminate the beam current by adjusting the contrast and brightness controls to minimum.
4. Confirm high voltage is within 28.2 KV and 32.9 KV. If reading is not within range, check horizontal circuit.

No high-voltage adjustment is provided on this chassis.

## FOCUS ADJUSTMENT

Adjust focus control (T402) for well defined scanning lines.

## PURITY AND CONVERGENCE ADJUSTMENTS

Purity and Convergence have been aligned at the factory. No re-alignment is necessary.

## MULTI-SOUND SECTION ADJUSTMENTS

Note: Multi-Sound Section must be adjusted after A101 or A102 (U/V Tuner), IC3401 (MTS Decoder), or IC802 (EEPROM) is replaced.

## INPUT LEVEL ADJUSTMENT

1. Connect a signal to the antenna terminals with audio of 1 KHz 100% modulation.
2. Turn off the receiver and disconnect the AC power cord (AC 120V line).
3. Connect voltmeter (RMS) to TP317 and ground.
4. While pressing the Menu key, reconnect the AC power cord. The Service Menu will now appear.
5. Select NO. 080 (ATT: MTS Input Level) with the ▲ or ▼ key.
6. Adjust the + or – key for a voltmeter reading of  $400 \pm 20$  mVrms at TP317.

## SEPARATION ADJUSTMENT

7. Turn off the receiver and disconnect the AC power cord (AC 120V line).
8. Connect oscilloscope CH1 to TP317 and CH2 to TP318 and ground.
9. Connect an MTS TV/Stereo generator to antenna terminal.
10. While pressing the Menu key, reconnect the AC power cord. The Service Menu will now appear.
11. Select pilot, 300Hz audio frequency and Left modulating signal.
12. Select NO. 081 (WDB: Wide Band) with the ▲ or ▼ key.
13. Adjust the + or – key for minimum low frequencies at TP317. (See Figure 7.)
14. Select 4 KHz audio frequency and Right modulating signal.
15. Select NO. 082 (SPC: Spectral) with the ▲ or ▼ key.
16. Adjust the + or – key for minimum high frequencies at TP318. (See Figure 7.)

Repeat adjustments (steps 11–16) until no further decreases in amplitude can be obtained. Press the MENU key to turn off the Service Menu display.

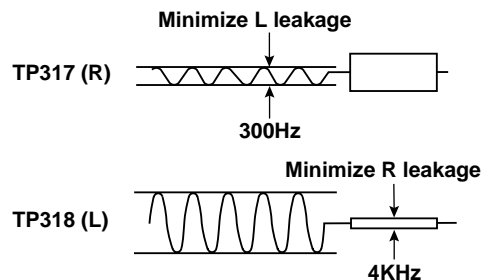


Figure 7. Separation Adjustments

## PINCUSHION CORRECTION ADJUSTMENT

1. Connect a color-bar generator to the antenna terminals and select a crosshatch pattern.
2. Set the picture controls to the Sports level.
3. Turn off the receiver and disconnect the AC power cord (AC 120V line).
4. While pressing the Menu key, reconnect the AC power cord. The Service Menu will now appear.
5. Select the items below with ▲ or ▼ key according to the symptoms of Figure 8.

NO.ITEM	Bit	NAME
11A	PAP2	7 - 2 Pin AMP
11D	PPH2	7 - 2 Pin Phase
11F	ABO2	7 - 2 AFC Bow
120	AAN2	7 - 2 AFC Angle
11B	UCP2	7 - 2 Upper Corner Pin
11C	LCP2	7 - 2 Lower Corner Pin

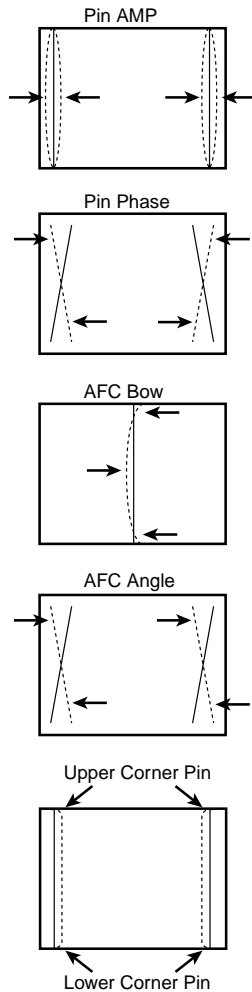


Figure 8. Pincushion Adjustments

6. Adjust the data with numeric key for straight vertical lines. To turn off the Service Menu display, press the MENU key.

## OSD ADJUSTMENT

1. Connect a color-bar generator to the antenna terminals and select a circular pattern (480I, 4:3).
2. Set the picture controls to the Sports level.
3. Turn off the receiver and disconnect the AC power cord. (120V AC line)
4. While pressing the MENU key, reconnect the AC power cord. The Service Menu display will now appear.
5. Select NO. 091 (OSD: On-Screen Display) with ▲ or ▼ key.
6. Adjust the + or - key for proper position shown in Figure 9. To turn off the Service Menu display, press the MENU key.

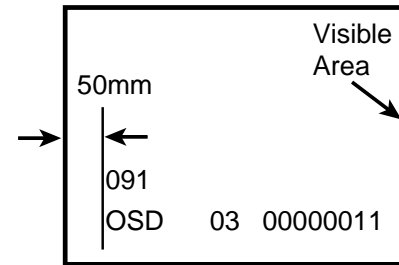


Figure 9.

## VIDEO INPUT LEVEL ADJUSTMENT

1. Connect a color-bar generator to the antenna terminals.
2. Switch the generator to the color-bar (NTSC) pattern.
3. Connect oscilloscope probe to TPY(C7022) and ground on the AV board.
4. Adjust VR7001 for video input level as shown in Figure 10 to 2.0Vp-p.

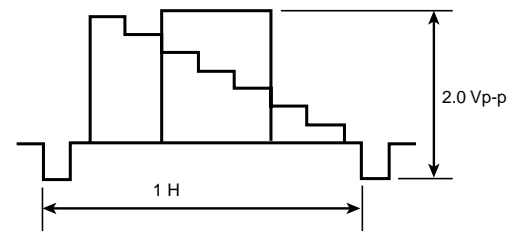


Figure 10.

## Y LEVEL OF PSC ADJUSTMENT

1. Connect a color-bar generator to the antenna terminals.
2. Switch the generator to the color-bar (NTSC) pattern.
3. Connect oscilloscope probe to Connector K7IPG (5pin) and ground on the main board.
4. Adjust VR7301 on the I/P board for Y level of Figure 11 to 0.7Vp-p.

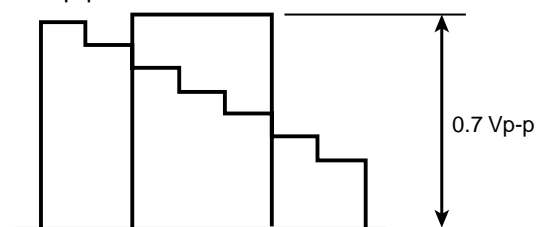


Figure 11.

# SERVICE HINTS

## POWER FAILURE DETECTOR

This unit is equipped with a Power Failure Detector function included in the CPU which checks for an abnormal condition in the chassis power supplies, including the power supply derived from the Horizontal Output Transformer.

If, while the power is on, a failure is caused by any of the following that results in a low voltage supply, the CPU will turn the unit off in 1.5 seconds to prevent further damage:

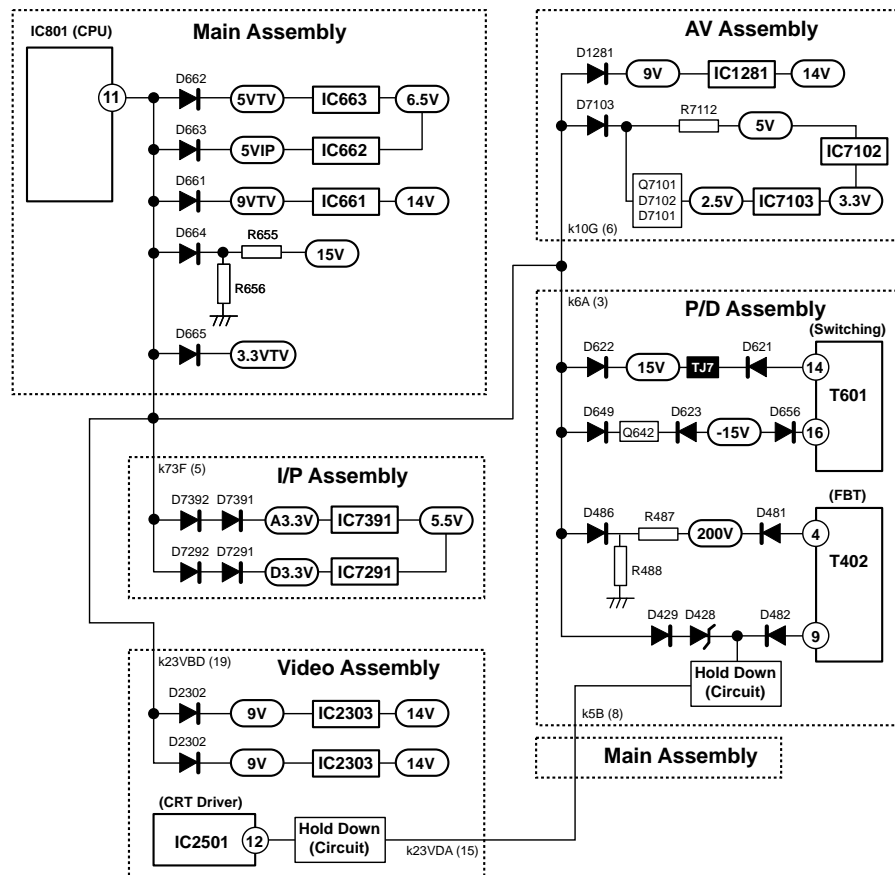
- Failure within the power supply circuits.
- A short circuit in the load side from the supply.
- Stoppage of the Horizontal Output Oscillator caused by the X-Radiation protection Hold-Down Circuit.

If, while the power is off, the power is switched on and any of these failures remains uncorrected, the CPU will shut off the power within 3 seconds.

*Check the following if the unit is turned off by the power failure detector.*

1. Disconnect the AC power cord (120V AC line) for at least 10 seconds.
2. Connect a DC Voltmeter to the following TEST POINTS.

**Block Diagram (Power Fail Lines) Figure 12**



3. Press the Power key and check for the proper voltage supplies.
4. If any of these voltages is low, the power failure detector should turn the unit off within 3 seconds.
5. Check all circuits listed above.

Note: This unit is equipped with a Power Surge Protection feature included in the CPU. If power failure occurs three times within 15 minutes, the CPU will automatically stop functioning to help prevent secondary damage. (TV will not turn on by pressing the power key.) To reset the operating programs within the CPU, disconnect the AC power cord for at least 10 seconds.



# MECHANICAL DISASSEMBLIES

## CABINET BACK REMOVAL

1. Refer to Figure 1, remove 14 screws.
2. Pull off cabinet back and remove.

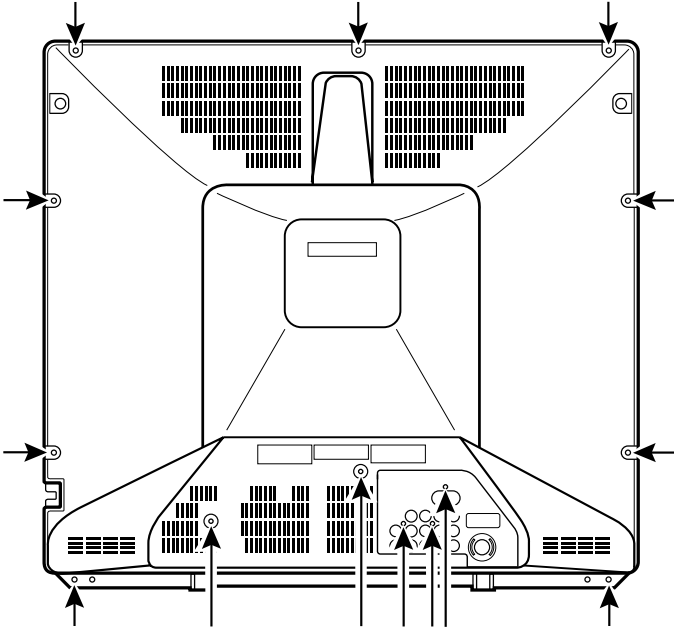


Figure 1. Cabinet Back Removal

## CHASSIS REMOVAL

1. Remove cabinet back.
2. Discharge the picture tube anode (2nd anode lead) to the dag coating (picture tube grounding lead).
3. Disconnect degaussing coil socket (KD), picture tube socket, deflection yoke connector (KX), speakers connector (KSP), picture tube ground leads (2), velocity modulation coil connector (K17A) and 2nd anode lead.
4. Remove chassis completely by sliding it straight back.

## PICTURE TUBE REMOVAL

**CAUTION:** Do not disturb the deflection yoke or magnet assembly on the picture tube neck. Care must be taken to keep these assemblies intact, unless picture tube is being replaced. Discharge the picture tube to the coating before handling the tube.

1. Remove chassis, referring to Chassis Removal instructions.
2. Place cabinet's front face down on a soft surface.
3. Remove the screw on each corner of the picture tube and GENTLY lift the picture tube out of the cabinet.
4. Install a replacement picture tube in reverse order. Properly install the degaussing coil and picture tube grounding lead on the picture tube. See Figure 2.

Note: If Picture Tube is being replaced, mount the Degaussing Coil properly on the tube. See Figure 2.

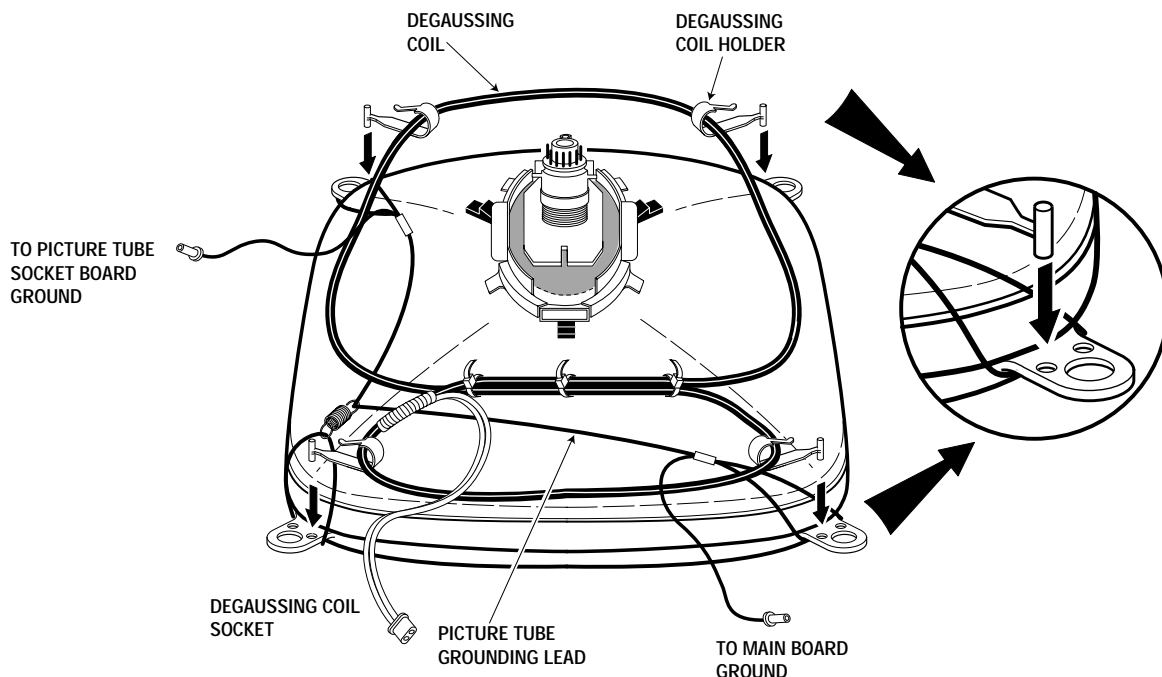


Figure 2. Picture Tube Removal

## CHASSIS ELECTRICAL PARTS LIST

**CAUTION:** To Protect against electrical shock and for continued product safety, refer to SAFETY PRECAUTIONS, X-RADIATION PRECAUTIONS, HIGH VOLTAGE HOLD-DOWN TEST, and PRODUCT SAFETY NOTICE on Page 2.

## PRODUCT SAFETY NOTICE

PRODUCT SAFETY SHOULD BE CONSIDERED WHEN A REPLACEMENT IS MADE IN ANY AREA OF A RECEIVER. COMPONENTS INDICATED BY A STAR (★) IN THIS PARTS LIST AND THE SCHEMATIC DIAGRAM DESIGNATE COMPONENTS IN WHICH SAFETY CAN BE OF SPECIAL SIGNIFICANCE. IT IS PARTICULARLY RECOMMENDED THAT ONLY PARTS DESIGNATED ON THE FOLLOWING PARTS LIST BE USED FOR COMPONENT REPLACEMENT DESIGNATED BY A STAR. NO DEVIATIONS FROM RESISTANCE, WATTAGE, AND VOLTAGE RATINGS MAY BE MADE FOR REPLACEMENT ITEMS DESIGNATED BY A STAR.

Notes: Parts having Location Number are located on the following boards.

Numbers 400, 600, Series .....On the Main Board and Power / Deflection Board

## Numbers 700 Series .....On the Picture Tube Socket Board

Numbers 900 Series .....Out of Board.

## Numbers 1700 Series . . . . . On the Velocity Modulation Board

Numbers 2000 Series .....On the Video Board

All Other Numbers .....On the Main Board and AV Board

Note: Schematic part location numbers may not always match with the part descriptions.  
The part descriptions are correct and should be used.

## CAPACITORS

## RESISTORS

NOTES:

Read description of the Capacitor as follows:

(Example)

**CERAMIC**      **100P**      **K**      **50V**

— Rated Voltage  
— Tolerance Symbols:  
less than 10PF  
A . .Not specified  
B . .±0.1PF      C . .±0.25PF  
D . .±0.5PF      F . .±1PF  
G . .±2PF      R . .±0.25 - 0PF  
S . .+0 - 0.25PF      E . .+0 - 1PF  
more than 10PF  
A . .Not specified  
B . .±0.1%      C . .±0.25%  
D . .±0.5%      F . .±1%  
G . .±2%      H . .±3%  
J . .±5%      K . .±10%  
L . .±15%      M . .±20%  
N . .±30%      P . .+100 - 0%  
Q . .+30 - 10%      T . .+50 - 10%  
U . .+75 - 10%      V . .+20 - 10%  
W . .+100 - 10%      X . .+40 - 20%  
Y . .+150 - 10%      Z . .+80 - 20%

— Rated Value: P...Pico Farad    U...Micro Farad

Material:

CERAMIC . . . . .Ceramic  
MT-PAPER . . . . .Metalized Paper  
POLYESTER . . .Polyester  
MT-POLYESTER . .Metalized Polyester  
POLYPRO . . . . .Polypropylene  
MT-POLYPRO . .Metalized Polypropylene  
COMPO-FILM . .Composite Film  
MT-COMPO . . .Metalized Composite  
STYRENE . . . . .Styrene  
TA-SOLID . . . . .Tantalum Solid  
AL-SOLID . . . . .Aluminum Solid  
ELECT . . . . .Electrolytic  
NP-ELECT . . . . .Non-Polarized Electrolytic  
OS-SOLID . . . . .Aluminum Solid with Organic Semiconductive Electrolytic

NOTES:

Read description of the Resistor as follows:

(Example)

**CARBON**

- 4.7K**
  - Tolerance Symbols:
    - A...0.05% B...0.1% C...25%
    - D...0.5% F...1% G...2%
    - J...5% K...10% M...20%
    - P...+5 -15%
  - Rated Value, ohms:
    - K...1,000 M...1,000,000
- J**
  - Tolerance Symbols:
    - A...0.05% B...0.1% C...25%
    - D...0.5% F...1% G...2%
    - J...5% K...10% M...20%
    - P...+5 -15%
- A**
  - Performance Symbols:
    - A...General B...Non-flammable
    - Z...Low noise
    - Other... Temperature coefficient
- 1/4W**
  - Rated Wattage

**Material:**

- CARBON ..... Carbon
- MT-FILM ..... Metal Film
- OXIDE-MT ..... Oxide Metal Film
- SOLID ..... Composition
- MT-GLAZE ..... Metal Glaze
- WIRE WOUND ..... Wire Wound
- CERAMIC RES ..... Ceramic
- FUSIBLE RES ..... Fusible

Schematic Location	Part No.	Description
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## MAIN PC BOARD

### CAPACITORS

C001	404 084 3801	ELECT	1U M	50V
C002	404 084 3801	ELECT	1U M	50V
C005	404 087 1200	ELECT	0.1U M	50V
C007	404 089 2700	ELECT	100U M	25V
C008	403 224 6009	CERAMIC	4700P K	50V
C009	403 224 6009	CERAMIC	4700P K	50V
C010	404 084 2903	ELECT	1000U M	16V
C011	404 084 2903	ELECT	1000U M	16V
C015	404 087 2306	ELECT	220U M	25V
C017	403 357 9601	CERAMIC	0.1U Z	50V
C100	403 224 6108	CERAMIC	0.01U K	50V
C101	404 084 2408	ELECT	470U M	6.3V
C102	403 224 6108	CERAMIC	0.01U K	50V
C103	404 084 3207	ELECT	47U M	16V
C104	403 357 9601	CERAMIC	0.1U Z	50V
C105	404 084 4303	ELECT	47U M	50V
C106	403 224 6108	CERAMIC	0.01U K	50V
C111	404 084 2408	ELECT	470U M	6.3V
C112	403 224 6108	CERAMIC	0.01U K	50V
C113	404 084 3207	ELECT	47U M	16V
C114	403 357 9601	CERAMIC	0.1U Z	50V
C115	404 084 4303	ELECT	47U M	50V
C116	403 224 6108	CERAMIC	0.01U K	50V
C121	404 084 2804	ELECT	100U M	16V
C122	403 279 0106	CERAMIC	0.1U Z	25V
C489	404 084 3306	ELECT	470U M	16V
C651	403 279 0106	CERAMIC	0.1U Z	25V
C652	404 084 3405	ELECT 1	000U M	25V
C653	404 087 1804	ELECT	1000U M	10V
C654	403 260 2003	MT-COMPO	1U J	50V
C661	404 084 2804	ELECT	100U M	16V
C662	404 084 2804	ELECT	100U M	16V
C663	403 279 0106	CERAMIC	0.1U Z	25V
C664	404 084 2804	ELECT	100U M	16V
C665	404 084 2804	ELECT	100U M	16V
C666	403 279 0106	CERAMIC	0.1U Z	25V
C668	404 084 2804	ELECT	100U M	16V
C669	403 279 0106	CERAMIC	0.1U Z	25V
C671	404 084 2804	ELECT	100U M	16V
C804	403 235 6203	CERAMIC	0.01U Z	50V
C809	403 235 6203	CERAMIC	0.01U Z	50V
C810	403 235 6203	CERAMIC	0.01U Z	50V
C811	403 235 6203	CERAMIC	0.01U Z	50V
C816	404 084 3801	ELECT	1U M	50V
C818	403 235 6203	CERAMIC	0.01U Z	50V
C819	403 235 1000	CERAMIC	220P J	50V
C802	403 235 4605	CERAMIC	270P K	50V
C821	403 224 5705	CERAMIC	1000P K	50V
C822	403 235 0706	CERAMIC	120P J	50V
C823	404 084 3801	ELECT	1U M	50V
C824	403 224 5507	CERAMIC	22P J	50V

Schematic Location	Part No.	Description
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C825	403 224 5507	CERAMIC	22P J	50V
C826	403 224 5507	CERAMIC	22P J	50V
C828	403 234 9601	CERAMIC	15P J	50V
C829	403 234 9601	CERAMIC	15P J	50V
C830	403 235 6203	CERAMIC	0.01U Z	50V
C833	403 224 5507	CERAMIC	22P J	50V
C834	403 224 5705	CERAMIC	1000P K	50V
C836	403 224 5507	CERAMIC	22P J	50V
C837	403 224 5507	CERAMIC	22P J	50V
C838	403 224 5507	CERAMIC	22P J	50V
C839	403 224 5507	CERAMIC	22P J	50V
C840	403 235 0300	CERAMIC	56P J	50V
C841	403 235 0003	CERAMIC	33P J	50V
C849	403 235 0300	CERAMIC	56P J	50V
C850	403 235 0300	CERAMIC	56P J	50V
C851	403 235 0300	CERAMIC	56P J	50V
C852	403 235 0300	CERAMIC	56P J	50V
C854	403 155 4600	CERAMIC	4P C	50V
C855	403 155 4600	CERAMIC	4P C	50V
C856	403 155 4600	CERAMIC	4P C	50V
C861	404 084 2408	ELECT	470U M	6.3V
C862	403 235 6203	CERAMIC	0.01U Z	50V
C863	404 084 3801	ELECT	1U M	50V
C864	403 235 6203	CERAMIC	0.01U Z	50V
C865	404 084 2507	ELECT	47U M	10V
C866	403 235 6203	CERAMIC	0.01U Z	50V
C867	404 085 4906	ELECT	2200U M	10V
C868	403 235 6203	CERAMIC	0.01U Z	50V
C869	403 235 6203	CERAMIC	0.01U Z	50V
C1261	403 279 0106	CERAMIC	0.1U Z	25V
C1262	404 084 3207	ELECT	47U M	16V
C1263	403 279 0106	CERAMIC	0.1U Z	25V
C1264	403 279 0106	CERAMIC	0.1U Z	25V
C1265	403 279 0106	CERAMIC	0.1U Z	25V
C1266	404 085 5606	NP-ELECT	22U M	16V
C1267	404 085 5606	NP-ELECT	22U M	16V
C1268	404 085 5606	NP-ELECT	22U M	16V
C1270	404 085 5606	NP-ELECT	22U M	16V
C1271	404 084 3801	ELECT	1U M	50V
C1273	404 085 5606	NP-ELECT	22U M	16V
C1276	404 085 5606	NP-ELECT	22U M	16V
C1286	404 084 3207	ELECT	47U M	16V
C1291	404 084 3801	ELECT	1U M	50V
C1815	403 279 0106	CERAMIC	0.1U Z	25V
C1818	403 279 0106	CERAMIC	0.1U Z	25V
C1851	404 084 3207	ELECT	47U M	16V
C1852	403 279 0106	CERAMIC	0.1U Z	25V
C1853	403 235 0607	CERAMIC	100P J	50V
C1854	403 235 0607	CERAMIC	100P J	50V
C1855	403 235 0904	CERAMIC	180P J	50V
C1857	403 235 1406	CERAMIC	470P J	50V
C1902	404 084 2705	ELECT	10U M	16V
C1903	404 084 2408	ELECT	470U M	6.3V
C2902	404 084 2705	ELECT	10U M	16V

Schematic Location	Part No.	Description
C2904	404 084 2705	ELECT 10U M 16V
C2905	403 279 0106	CERAMIC 0.1U Z 25V
C2907	404 084 2705	ELECT 10U M 16V
C2908	404 084 2804	ELECT 100U M 16V
C3401	404 087 1200	ELECT 0.1U M 50V
C3404	404 089 6500	NP-ELECT 4.7U M 50V
C3406	403 325 2504	CERAMIC 0.012U K 50V
C3407	403 235 5701	CERAMIC 5600P K 50V
C3408	404 084 3702	ELECT 0.47U M 50V
C3411	404 084 3702	ELECT 0.47U M 50V
C3412	404 084 3207	ELECT 47U M 16V
C3413	404 091 6604	ELECT 4.7U M 25V
C3414	404 084 3306	ELECT 470U M 16V
C3415	404 084 2903	ELECT 1000U M 16V
C3416	404 089 6500	NP-ELECT 4.7U M 50V
C3417	404 091 6604	ELECT 4.7U M 25V
C3418	404 089 6500	NP-ELECT 4.7U M 50V
C3421	403 224 5606	CERAMIC 2700P K 50V
C3422	403 323 3602	CERAMIC 0.047U K 50V
C3423	403 342 9203	TA-SOLID 3.3U K 10V
C3424	404 089 6500	NP-ELECT 4.7U M 50V
C3426	403 299 1820	TA-SOLID 10U K 10V
C3427	404 084 3801	ELECT 1U M 50V
C3431	403 224 6009	CERAMIC 4700P K 50V
C3432	404 087 1200	ELECT 0.1U M 50V
C3433	403 224 6009	CERAMIC 4700P K 50V
C3434	403 343 4603	CERAMIC 0.022U K 50V
C3435	404 091 6604	ELECT 4.7U M 25V
C3436	404 089 6500	NP-ELECT 4.7U M 50V
C3437	404 091 6604	ELECT 4.7U M 25V
C3439	404 089 6500	NP-ELECT 4.7U M 50V
C3446	404 084 6901	NP-ELECT 1U M 50V
C3448	404 084 6901	NP-ELECT 1U M 50V
C3501	404 084 2804	ELECT 100U M 16V
C3521	403 279 0106	CERAMIC 0.1U Z 25V
C8001	404 084 3207	ELECT 47U M 16V
C8002	403 279 0106	CERAMIC 0.1U Z 25V
C8003	404 084 2507	ELECT 47U M 10V
C8004	403 235 0409	CERAMIC 68P J 50V
C8011	403 224 5507	CERAMIC 22P J 50V
C8013	403 224 6108	CERAMIC 0.01U K 50V
C8015	404 087 2801	ELECT 0.22 M 50V
C8021	403 357 9601	CERAMIC 0.1U Z 50V
C8022	404 084 3207	ELECT 47U M 16V
C8027	403 224 6108	CERAMIC 0.01U K 50V
C8028	403 224 6108	CERAMIC 0.01U K 50V
C8032	404 084 3207	ELECT 47U M 16V
C8033	403 357 9601	CERAMIC 0.1U Z 50V
C8034	403 224 6108	CERAMIC 0.01U K 50V
C8035	403 224 6108	CERAMIC 0.01U K 50V
C8036	404 084 2705	ELECT 10U M 16V
C8037	403 224 6108	CERAMIC 0.01U K 50V
C8041	403 224 6108	CERAMIC 0.01U K 50V
C8042	404 084 3207	ELECT 47U M 16V

Schematic Location	Part No.	Description
C8049	403 224 6108	CERAMIC 0.01U K 50V
C8051	403 224 6108	CERAMIC 0.01U K 50V
C8052	403 224 6108	CERAMIC 0.01U K 50V
C8053	403 224 6108	CERAMIC 0.01U K 50V
C8054	403 224 6108	CERAMIC 0.01U K 50V
C8071	404 084 2705	ELECT 10U M 16V
C8072	404 084 3207	ELECT 47U M 16V
C8074	403 235 0607	CERAMIC 100P J 50V
C8076	403 235 0607	CERAMIC 100P J 50V
C8081	404 084 3702	ELECT 0.47U M 50V
C8082	403 224 5804	CERAMIC 2200P K 50V
C8091	403 224 6108	CERAMIC 0.01U K 50V

#### DIODES

D651	407 223 5209	DIODE RK46 015-304
D661	407 012 4406	DIODE 1SS133
D662	407 012 4406	DIODE 1SS133
D663	407 012 4406	DIODE 1SS133
D664	407 012 4406	DIODE 1SS133
D665	407 012 4406	DIODE 1SS133
D801	407 206 5608	ZENER DIODE UDZS10B TE-17
D802	407 206 5608	ZENER DIODE UDZS10B TE-17
D803	407 206 5608	ZENER DIODE UDZS10B TE-17
D810	407 206 5608	ZENER DIODE UDZS10B TE-17
D812	407 149 0807	DIODE 1SS355 TE-17
D815	407 206 5608	ZENER DIODE UDZS10B TE-17
D818	407 206 5608	ZENER DIODE UDZS10B TE-17
D827	407 206 5608	ZENER DIODE UDZS10B TE-17
D828	407 206 5608	ZENER DIODE UDZS10B TE-17
D829	407 206 5608	ZENER DIODE UDZS10B TE-17
D830	407 206 5608	ZENER DIODE UDZS10B TE-17
D831	407 208 9703	ZENER DIODE UDZS5.6B TE-17
D832	407 208 9703	ZENER DIODE UDZS5.6B TE-17
D834	407 206 5608	ZENER DIODE UDZS10B TE-17
D836	407 206 5608	ZENER DIODE UDZS10B TE-17
D837	407 206 5608	ZENER DIODE UDZS10B TE-17
D838	407 206 5608	ZENER DIODE UDZS10B TE-17
D839	407 206 5608	ZENER DIODE UDZS10B TE-17
D841	407 206 5608	ZENER DIODE UDZS10B TE-17
D844	407 206 6308	ZENER DIODE UDZS5.1B TE-17
D848	407 206 5608	ZENER DIODE UDZS10B TE-17
D896	407 206 5608	ZENER DIODE UDZS10B TE-17
D897	407 206 5608	ZENER DIODE UDZS10B TE-17
D898	407 206 5608	ZENER DIODE UDZS10B TE-17
D899	407 206 5608	ZENER DIODE UDZS10B TE-17
D1901	407 063 9306	ZENER DIODE MTZJ7.5C
D1901	407 057 6502	ZENER DIODE RD7.5EB3
D3401	407 092 9526	DIODE SB07-03C-TB
D8000	407 099 4504	ZENER DIODE MTZJ3.9A

Schematic Location	Part No.	Description
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#### INTEGRATED CIRCUITS

IC001	409 389 4607	IC LA4600
IC651	410 401 0002	IC SI-8050SS LF1113
IC661	410 401 0101	IC SI-3090FA LF1113
IC662	410 330 6007	IC SI-3050FA LF1113
IC663	410 330 6007	IC SI-3050FA LF1113
IC801	410 460 6700	IC M37281MFH-***SP
IC802	409 301 2803	IC MN1381-Q
IC803	409 495 7004	IC CAT24WC04P
	409 427 4705	IC M24C04-BN6
	409 343 6302	IC 24LC04B/P
IC1251	409 051 2930	IC TC4053BF-EL
IC1261	409 482 0308	IC MM1224XF
IC1262	409 482 0308	IC MM1224XF
IC1263	409 482 0308	IC MM1224XF
IC1803	410 398 1600	IC TC74HC4066AF
IC1851	409 223 1809	IC MC74HC04AF
IC3401	409 467 1108	IC CXA2134Q-T6
IC8001	409 542 4307	IC M65665FP

#### COILS

L001	645 008 2894	INDUCTOR, 5.6U K
	645 016 3104	INDUCTOR, 5.6U K
L101	645 008 2894	INDUCTOR, 5.6U K
L111	645 008 2894	INDUCTOR, 5.6U K
L651	645 045 9436	INDUCTOR, 330U K
L661	645 049 3751	INDUCTOR, 47UH K
L801	645 008 2894	INDUCTOR, 5.6U K
	645 016 3104	INDUCTOR, 5.6U K
L802	645 008 2894	INDUCTOR, 5.6U K
	645 016 3104	INDUCTOR, 5.6U K
L803	645 008 2894	INDUCTOR, 5.6U K
	645 016 3104	INDUCTOR, 5.6U K
L828	645 006 4500	INDUCTOR, 2.2U J
L829	645 025 7797	INDUCTOR, 120 OHM
L837	645 006 2490	INDUCTOR, 1U K
	645 016 2411	INDUCTOR, 1U K
L839	645 006 2490	INDUCTOR, 1U K
	645 016 2411	INDUCTOR, 1U K
L1851	645 008 2894	INDUCTOR, 5.6U K
	645 016 3104	INDUCTOR, 5.6U K
L1901	645 008 2894	INDUCTOR, 5.6U K
	645 016 3104	INDUCTOR, 5.6U K
L8001	645 025 7797	INDUCTOR, 120 OHM
L8002	645 025 7797	INDUCTOR, 120 OHM
L8003	645 025 7797	INDUCTOR, 120 OHM
L8007	645 008 2894	INDUCTOR, 5.6U K
	645 016 3104	INDUCTOR, 5.6U K
L8008	645 008 2894	INDUCTOR, 5.6U K
	645 016 3104	INDUCTOR, 5.6U K
L8024	610 031 3873	INDUCTOR, 10U K
	645 016 2534	INDUCTOR, 10U K
L8032	610 031 3873	INDUCTOR, 10U K
	645 016 2534	INDUCTOR, 10U K

Schematic Location	Part No.	Description
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L8036	610 031 3873	INDUCTOR, 10U K
	645 016 2534	INDUCTOR, 10U K
L8070	645 008 2894	INDUCTOR, 5.6U K
	645 016 3104	INDUCTOR, 5.6U K
L8074	645 003 9812	INDUCTOR, 33U K
	645 016 2985	INDUCTOR, 33U K
L8094	645 006 2490	INDUCTOR, 1U K
	645 016 2411	INDUCTOR, 1U K
L8098	645 006 2490	INDUCTOR, 1U K
	645 016 2411	INDUCTOR, 1U K

#### TRANSISTORS

Q001	405 011 8401	TR 2SC1740S-Q
	405 011 8500	TR 2SC1740S-R
	405 011 8609	TR 2SC1740S-S
	405 012 2002	TR 2SC1815-GR
	405 012 2101	TR 2SC1815-O
	405 012 2309	TR 2SC1815-Y
	405 157 0505	TR 2SC536NF-NPA
	405 151 8705	TR 2SC536NG-NPA
	405 020 7501	TR 2SC945A-PA
	405 020 7709	TR 2SC945A-QA
	405 020 7907	TR 2SC945A-RA
Q1201	405 011 8401	TR 2SC1740S-Q
	405 011 8500	TR 2SC1740S-R
	405 011 8609	TR 2SC1740S-S
	405 012 2002	TR 2SC1815-GR
	405 012 2101	TR 2SC1815-O
	405 012 2309	TR 2SC1815-Y
	405 157 0505	TR 2SC536NF-NPA
	405 151 8705	TR 2SC536NG-NPA
	405 020 7501	TR 2SC945A-PA
	405 020 7709	TR 2SC945A-QA
	405 020 7907	TR 2SC945A-RA
Q1211	405 011 8401	TR 2SC1740S-Q
	405 011 8500	TR 2SC1740S-R
	405 011 8609	TR 2SC1740S-S
	405 012 2002	TR 2SC1815-GR
	405 012 2101	TR 2SC1815-O
	405 012 2309	TR 2SC1815-Y
	405 157 0505	TR 2SC536NF-NPA
	405 151 8705	TR 2SC536NG-NPA
	405 020 7501	TR 2SC945A-PA
	405 020 7709	TR 2SC945A-QA
	405 020 7907	TR 2SC945A-RA
Q1212	405 011 8401	TR 2SC1740S-Q
	405 011 8500	TR 2SC1740S-R
	405 011 8609	TR 2SC1740S-S
	405 012 2002	TR 2SC1815-GR
	405 012 2101	TR 2SC1815-O
	405 012 2309	TR 2SC1815-Y
	405 157 0505	TR 2SC536NF-NPA
	405 151 8705	TR 2SC536NG-NPA

Schematic Location	Part No.	Description
Q1252	Q1212 (Cont.) 405 020 7501	TR 2SC945A-PA
	405 020 7709	TR 2SC945A-QA
	405 020 7907	TR 2SC945A-RA
	405 011 8401	TR 2SC1740S-Q
	405 011 8500	TR 2SC1740S-R
	405 011 8609	TR 2SC1740S-S
	405 012 2002	TR 2SC1815-GR
	405 012 2101	TR 2SC1815-O
	405 012 2309	TR 2SC1815-Y
	405 157 0505	TR 2SC536NF-NPA
	405 151 8705	TR 2SC536NG-NPA
	405 020 7501	TR 2SC945A-PA
	405 020 7709	TR 2SC945A-QA
	405 020 7907	TR 2SC945A-RA
Q2902	405 014 4509	TR 2SC2412K-T-96-R
	405 014 4608	TR 2SC2412K-T-96-S
	405 015 8724	TR 2SC2812-L6-TB
	405 015 8922	TR 2SC2812-L7-TB
	405 163 1602	TR 2SC2812N-L6-TB
	405 163 1701	TR 2SC2812N-L7-TB
	405 173 9803	TR 2SC3928A1R
	405 173 9902	TR 2SC3928A1S
Q2904	405 014 4509	TR 2SC2412K-T-96-R
	405 014 4608	TR 2SC2412K-T-96-S
	405 015 8724	TR 2SC2812-L6-TB
	405 015 8922	TR 2SC2812-L7-TB
	405 163 1602	TR 2SC2812N-L6-TB
	405 163 1701	TR 2SC2812N-L7-TB
	405 173 9803	TR 2SC3928A1R
	405 173 9902	TR 2SC3928A1S
Q2906	405 014 4509	TR 2SC2412K-T-96-R
	405 014 4608	TR 2SC2412K-T-96-S
	405 015 8724	TR 2SC2812-L6-TB
	405 015 8922	TR 2SC2812-L7-TB
	405 163 1602	TR 2SC2812N-L6-TB
	405 163 1701	TR 2SC2812N-L7-TB
	405 173 9803	TR 2SC3928A1R
	405 173 9902	TR 2SC3928A1S
Q3508	405 014 4509	TR 2SC2412K-T-96-R
	405 014 4608	TR 2SC2412K-T-96-S
	405 015 8724	TR 2SC2812-L6-TB
	405 015 8922	TR 2SC2812-L7-TB
	405 163 1602	TR 2SC2812N-L6-TB
	405 163 1701	TR 2SC2812N-L7-TB
	405 173 9803	TR 2SC3928A1R
	405 173 9902	TR 2SC3928A1S
Q8000	405 023 5009	TR 2SD400-E-MP
	405 023 5306	TR 2SD400-F-MP
Q8005	405 011 8401	TR 2SC1740S-Q
	405 011 8500	TR 2SC1740S-R
	405 011 8609	TR 2SC1740S-S
	405 012 2002	TR 2SC1815-GR
	405 012 2101	TR 2SC1815-O
	405 012 2309	TR 2SC1815-Y

Schematic Location	Part No.	Description
Q8006	405 157 0505	TR 2SC536NF-NPA
	405 151 8705	TR 2SC536NG-NPA
	405 020 7501	TR 2SC945A-PA
	405 020 7709	TR 2SC945A-QA
	405 020 7907	TR 2SC945A-RA
	405 011 8401	TR 2SC1740S-Q
	405 011 8500	TR 2SC1740S-R
	405 011 8609	TR 2SC1740S-S
	405 012 2002	TR 2SC1815-GR
	405 012 2101	TR 2SC1815-O
	405 012 2309	TR 2SC1815-Y
	405 157 0505	TR 2SC536NF-NPA
	405 151 8705	TR 2SC536NG-NPA
	405 020 7501	TR 2SC945A-PA
	405 020 7709	TR 2SC945A-QA
Q8073	405 020 7907	TR 2SC945A-RA
	405 011 8401	TR 2SC1740S-Q
	405 011 8500	TR 2SC1740S-R
	405 011 8609	TR 2SC1740S-S
	405 012 2002	TR 2SC1815-GR
	405 012 2101	TR 2SC1815-O
	405 012 2309	TR 2SC1815-Y
	405 157 0505	TR 2SC536NF-NPA
	405 151 8705	TR 2SC536NG-NPA
	405 020 7501	TR 2SC945A-PA
	405 020 7709	TR 2SC945A-QA
	405 020 7907	TR 2SC945A-RA
Q8076	406 000 6804	TR 2SA1015-GR(SAN)
	405 001 7407	TR 2SA1015-O(SAN)
	405 001 7605	TR 2SA1015-Y(SAN)
	405 004 3109	TR 2SA564A-Q(CU)
	405 004 3208	TR 2SA564A-R(CU)
	405 151 3304	TR 2SA608NF-NPA
	405 006 1707	TR 2SA933S-Q
	405 006 1806	TR 2SA933S-R
Q8083	406 000 6804	TR 2SA1015-GR(SAN)
	405 001 7407	TR 2SA1015-O(SAN)
	405 001 7605	TR 2SA1015-Y(SAN)
	405 004 3109	TR 2SA564A-Q(CU)
	405 004 3208	TR 2SA564A-R(CU)
	405 151 3304	TR 2SA608NF-NPA
	405 006 1707	TR 2SA933S-Q
	405 006 1806	TR 2SA933S-R
Q8093	405 039 3303	TR 2SC3114-R
	405 039 3402	TR 2SC3114-S
	405 017 1901	TR 2SC3114-T
Q8097	405 039 3303	TR 2SC3114-R
	405 039 3402	TR 2SC3114-S
	405 017 1901	TR 2SC3114-T

Schematic Location	Part No.	Description
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## RESISTORS

R001	401 024 9701	CARBON 12K JA 1/6W
R002	401 024 9701	CARBON 12K JA 1/6W
R003	401 256 3805	MT-GLAZE 1.5K JA 1/10W
R004	401 256 3805	MT-GLAZE 1.5K JA 1/10W
R008	401 026 9907	CARBON 4.7K JA 1/6W
R011	401 026 3905	CARBON 330 JA 1/6W
R012	401 027 2600	CARBON 5.6K JA 1/6W
R101	401 255 6500	MT-GLAZE 100 JA 1/10W
R102	401 255 6500	MT-GLAZE 100 JA 1/10W
R103	401 024 6700	CARBON 100 JA 1/6W
R106	401 024 6700	CARBON 100 JA 1/6W
R111	401 024 6700	CARBON 100 JA 1/6W
R112	401 024 6700	CARBON 100 JA 1/6W
R113	401 255 6500	MT-GLAZE 100 JA 1/10W
R116	401 255 6500	MT-GLAZE 100 JA 1/10W
R118	401 150 5905	MT-GLAZE 10K JA 1/10W
R651	401 256 2907	MT-GLAZE 150 JA 1/10W
R652	401 162 4002	MT-GLAZE 560 JA 1/10W
R655	401 162 3104	MT-GLAZE 3.3K JA 1/10W
R656	401 150 6100	MT-GLAZE 2.2K JA 1/10W
R657	401 150 6001	MT-GLAZE 0.000 ZA 1/10W
R659	401 150 6001	MT-GLAZE 0.000 ZA 1/10W
★ R663	401 069 0404	OXIDE-MT 6.8 JA 2W
★ R664	401 066 3002	OXIDE-MT 2.2 JA 2W
R667	401 162 3708	MT-GLAZE 4.7K JA 1/10W
R802	401 024 7400	CARBON 10K JA 1/6W
R803	401 024 6700	CARBON 100 JA 1/6W
R806	401 255 6500	MT-GLAZE 100 JA 1/10W
R807	401 024 6700	CARBON 100 JA 1/6W
R808	401 024 6700	CARBON 100 JA 1/6W
R809	401 255 6500	MT-GLAZE 100 JA 1/10W
R810	401 255 6500	MT-GLAZE 100 JA 1/10W
R811	401 162 3401	MT-GLAZE 39K JA 1/10W
R812	401 150 5905	MT-GLAZE 10K JA 1/10W
R813	401 150 5905	MT-GLAZE 10K JA 1/10W
R815	401 024 6700	CARBON 100 JA 1/6W
R819	401 024 7004	CARBON 1K JA 1/6W
R822	401 025 7805	CARBON 2.2K JA 1/6W
R823	401 255 6005	MT-GLAZE 1M JA 1/10W
R828	401 162 3708	MT-GLAZE 4.7K JA 1/10W
R830	401 255 6500	MT-GLAZE 100 JA 1/10W
R831	401 024 6700	CARBON 100 JA 1/6W
R832	401 150 5806	MT-GLAZE 100K JA 1/10W
R833	401 024 6700	CARBON 100 JA 1/6W
R834	401 024 6700	CARBON 100 JA 1/6W
R835	401 024 7400	CARBON 10K JA 1/6W
R836	401 150 5905	MT-GLAZE 10K JA 1/10W
R837	401 162 4101	MT-GLAZE 5.6K JA 1/10W
R838	401 150 5905	MT-GLAZE 10K JA 1/10W
R839	401 162 4101	MT-GLAZE 5.6K JA 1/10W
R840	401 027 2600	CARBON 5.6K JA 1/6W
R841	401 024 6700	CARBON 100 JA 1/6W
R842	401 024 6700	CARBON 100 JA 1/6W

Schematic Location	Part No.	Description
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R843	401 024 7400	CARBON 10K JA 1/6W
R844	401 024 7004	CARBON 1K JA 1/6W
R845	401 150 5905	MT-GLAZE 10K JA 1/10W
R846	401 150 5905	MT-GLAZE 10K JA 1/10W
R847	401 162 3708	MT-GLAZE 4.7K JA 1/10W
R848	401 162 3708	MT-GLAZE 4.7K JA 1/10W
R849	401 256 3805	MT-GLAZE 1.5K JA 1/10W
R850	401 162 3708	MT-GLAZE 4.7K JA 1/10W
R851	401 162 3708	MT-GLAZE 4.7K JA 1/10W
R852	401 162 3708	MT-GLAZE 4.7K JA 1/10W
R853	401 024 6700	CARBON 100 JA 1/6W
R854	401 024 6700	CARBON 100 JA 1/6W
R855	401 024 6700	CARBON 100 JA 1/6W
R856	401 024 6700	CARBON 100 JA 1/6W
R881	401 150 5905	MT-GLAZE 10K JA 1/10W
R882	401 150 5905	MT-GLAZE 10K JA 1/10W
R891	401 150 6100	MT-GLAZE 2.2K JA 1/10W
R893	401 024 7004	CARBON 1K JA 1/6W
R894	401 024 7004	CARBON 1K JA 1/6W
R895	401 150 6209	MT-GLAZE 1K JA 1/10W
R896	401 024 6700	CARBON 100 JA 1/6W
R897	401 024 6700	CARBON 100 JA 1/6W
R898	401 024 6700	CARBON 100 JA 1/6W
R899	401 024 6700	CARBON 100 JA 1/6W
R1201	401 025 7805	CARBON 2.2K JA 1/6W
R1208	401 024 7004	CARBON 1K JA 1/6W
R1211	401 150 6100	MT-GLAZE 2.2K JA 1/10W
R1212	401 256 6608	MT-GLAZE 68K JA 1/10W
R1213	401 150 6209	MT-GLAZE 1K JA 1/10W
R1218	401 024 7004	CARBON 1K JA 1/6W
R1252	401 027 5908	CARBON 68K JA 1/6W
R1253	401 150 6209	MT-GLAZE 1K JA 1/10W
R1254	401 256 1702	MT-GLAZE 33K JA 1/10W
R1256	401 162 3005	MT-GLAZE 22K JA 1/10W
R1262	401 027 6608	CARBON 75 JA 1/6W
R1263	401 027 6608	CARBON 75 JA 1/6W
R1264	401 256 1702	MT-GLAZE 33K JA 1/10W
R1265	401 256 2709	MT-GLAZE 75 JA 1/10W
R1266	401 027 6608	CARBON 75 JA 1/6W
R1268	401 256 2709	MT-GLAZE 75 JA 1/10W
R1269	401 256 2709	MT-GLAZE 75 JA 1/10W
R1270	401 255 6500	MT-GLAZE 100 JA 1/10W
R1271	401 255 6500	MT-GLAZE 100 JA 1/10W
R1272	401 024 6700	CARBON 100 JA 1/6W
R1815	401 150 5806	MT-GLAZE 100K JA 1/10W
R1816	401 150 5806	MT-GLAZE 100K JA 1/10W
R1818	401 024 7707	CARBON 100K JA 1/6W
R1819	401 024 7707	CARBON 100K JA 1/6W
R1851	401 025 4606	CARBON 18K JA 1/6W
R1852	401 162 3104	MT-GLAZE 3.3K JA 1/10W
R1855	401 256 3607	MT-GLAZE 15K JA 1/10W
R1856	401 256 7209	MT-GLAZE 18K JA 1/10W
R1857	401 256 6608	MT-GLAZE 68K JA 1/10W
R1901	401 150 5905	MT-GLAZE 10K JA 1/10W

Schematic Location	Part No.	Description
R1902	401 150 6209	MT-GLAZE 1K JA 1/10W
R1903	401 162 2800	MT-GLAZE 1.8K JA 1/10W
R1904	401 150 6100	MT-GLAZE 2.2K JA 1/10W
R1905	401 256 7605	MT-GLAZE 3.9K JA 1/10W
R1906	401 162 4101	MT-GLAZE 5.6K JA 1/10W
R1907	401 256 0408	MT-GLAZE 12K JA 1/10W
R1909	401 024 7004	CARBON 1K JA 1/6W
R1910	401 024 7004	CARBON 1K JA 1/6W
R2906	401 256 5601	MT-GLAZE 47 JA 1/10W
R2907	401 256 0408	MT-GLAZE 12K JA 1/10W
R2908	401 256 0408	MT-GLAZE 12K JA 1/10W
R2909	401 256 5601	MT-GLAZE 47 JA 1/10W
R2910	401 150 6100	MT-GLAZE 2.2K JA 1/10W
R2916	401 256 5601	MT-GLAZE 47 JA 1/10W
R2917	401 256 0408	MT-GLAZE 12K JA 1/10W
R2918	401 256 0408	MT-GLAZE 12K JA 1/10W
R2919	401 256 5601	MT-GLAZE 47 JA 1/10W
R2920	401 150 6100	MT-GLAZE 2.2K JA 1/10W
R2926	401 256 5601	MT-GLAZE 47 JA 1/10W
R2927	401 256 0408	MT-GLAZE 12K JA 1/10W
R2928	401 256 0408	MT-GLAZE 12K JA 1/10W
R2929	401 256 5601	MT-GLAZE 47 JA 1/10W
R2930	401 150 6100	MT-GLAZE 2.2K JA 1/10W
R2931	401 256 2709	MT-GLAZE 75 JA 1/10W
R2932	401 256 2709	MT-GLAZE 75 JA 1/10W
R2933	401 256 2709	MT-GLAZE 75 JA 1/10W
R2934	401 150 6001	MT-GLAZE 0.000 ZA 1/10W
R2935	401 150 6001	MT-GLAZE 0.000 ZA 1/10W
R2936	401 150 6001	MT-GLAZE 0.000 ZA 1/10W
R3401	401 025 7409	CARBON 220 JA 1/6W
R3402	401 025 7409	CARBON 220 JA 1/6W
R3406	401 150 5806	MT-GLAZE 100K JA 1/10W
R3407	401 255 6005	MT-GLAZE 1M JA 1/10W
R3411	401 265 4008	MT-GLAZE 62K JA 1/10W
R3421	401 162 3104	MT-GLAZE 3.3K JA 1/10W
R3422	401 255 6401	MT-GLAZE 3K JA 1/10W
R3426	401 256 7605	MT-GLAZE 3.9K JA 1/10W
R3432	401 150 5905	MT-GLAZE 10K JA 1/10W
R3433	401 150 5905	MT-GLAZE 10K JA 1/10W
R3434	401 162 4002	MT-GLAZE 560 JA 1/10W
R3435	401 150 5806	MT-GLAZE 100K JA 1/10W
R3436	401 162 4002	MT-GLAZE 560 JA 1/10W
R3437	401 150 5806	MT-GLAZE 100K JA 1/10W
R3461	401 025 4200	CARBON 1.8K JA 1/6W
R3462	401 150 6100	MT-GLAZE 2.2K JA 1/10W
R3504	401 150 6001	MT-GLAZE 0.000 ZA 1/10W
R3505	401 256 3805	MT-GLAZE 1.5K JA 1/10W
R3515	401 026 9303	CARBON 47 JA 1/6W
R8000	401 026 3905	CARBON 330 JA 1/6W
★ R8002	401 060 1707	OXIDE-MT 22 JA 1W
R8003	401 150 5905	MT-GLAZE 10K JA 1/10W
R8004	401 024 7400	CARBON 10K JA 1/6W
R8005	401 162 3708	MT-GLAZE 4.7K JA 1/10W
R8006	401 162 3708	MT-GLAZE 4.7K JA 1/10W

Schematic Location	Part No.	Description
R8007	401 256 6301	MT-GLAZE 47K JA 1/10W
R8008	401 256 6301	MT-GLAZE 47K JA 1/10W
R8011	401 150 6001	MT-GLAZE 0.000 ZA 1/10W
R8014	401 255 9600	MT-GLAZE 820K JA 1/10W
R8015	401 255 5800	MT-GLAZE 2K JA 1/10W
R8036	401 150 6209	MT-GLAZE 1K JA 1/10W
R8044	401 150 6001	MT-GLAZE 0.000 ZA 1/10W
R8071	401 162 3005	MT-GLAZE 22K JA 1/10W
R8072	401 162 3005	MT-GLAZE 22K JA 1/10W
R8073	401 150 6209	MT-GLAZE 1K JA 1/10W
R8074	401 150 6209	MT-GLAZE 1K JA 1/10W
R8076	401 256 6905	MT-GLAZE 680 JA 1/10W
R8077	401 027 5205	CARBON 680 JA 1/6W
R8081	401 152 3206	MT-GLAZE 330 JA 1/10W
R8082	401 256 6608	MT-GLAZE 68K JA 1/10W
R8083	401 256 1405	MT-GLAZE 330K JA 1/10W
R8084	401 150 6001	MT-GLAZE 0.000 ZA 1/10W
R8085	401 256 3805	MT-GLAZE 1.5K JA 1/10W
R8088	401 256 3607	MT-GLAZE 15K JA 1/10W
R8089	401 256 3607	MT-GLAZE 15K JA 1/10W
R8091	401 150 5905	MT-GLAZE 10K JA 1/10W
R8092	401 256 7209	MT-GLAZE 18K JA 1/10W
R8093	401 256 6301	MT-GLAZE 47K JA 1/10W
R8095	401 150 5905	MT-GLAZE 10K JA 1/10W
R8096	401 256 7209	MT-GLAZE 18K JA 1/10W
R8097	401 256 6301	MT-GLAZE 47K JA 1/10W

#### SWITCHES

SW1901	645 027 7382	SWITCH, PUSH 1P-1TX1
SW1902	645 027 7382	SWITCH, PUSH 1P-1TX1
SW1903	645 027 7382	SWITCH, PUSH 1P-1TX1
SW1904	645 027 7382	SWITCH, PUSH 1P-1TX1
SW1905	645 027 7382	SWITCH, PUSH 1P-1TX1
SW1906	645 027 7382	SWITCH, PUSH 1P-1TX1

#### MISCELLANEOUS

A100	610 302 9894	ASSY, PWB, MAIN-G7FAM
★ A101	645 053 4553	TUNER, TU/IF
★ A102	645 053 4553	TUNER, TU/IF
A103	645 057 2272	RF SPLITTER
A103A	652 001 1526	CORD, ANT
A103B	652 001 1526	CORD, ANT
A1901	645 047 6228	UNIT, REMOCON RECEIVER
K1002	645 057 1718	JACK, RCA-5(6-1)
X801	645 026 8434	OSC, CRYSTAL 8.000MHZ
X8011	645 041 1564	OSC, CRYSTAL 14.31818MHZ



Schematic Location	Part No.	Description
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## POWER / DEFLECTION PC BOARD

### CAPACITORS

C401	403 050 6600	ELECT	3.3U M	50V
C402	403 148 1609	ELECT	470U M	50V
★ C403	403 247 5003	CERAMIC	470P K	1K
★ C404	403 222 1907	CERAMIC	2200P K	1K
	403 263 6305	CERAMIC	2200P K	1K
C405	403 334 4209	ELECT	2200U M	16V
C408	403 364 5405	CERAMIC	150P K	1K
★ C411	403 372 0409	MT-POLYPRO	5600P H	1.5K
★ C412	403 353 1005	MT-POLYPRO	4700P H	1.5K
★ C414	403 076 0507	CERAMIC	2200P K	500V
★ C415	403 324 3106	CERAMIC	820P K	3K
★ C416	403 076 1405	CERAMIC	2700P K	500V
★ C417	403 036 5207	CERAMIC	68P J	500V
C421	404 091 6406	ELECT	220U M	6.3V
★ C423	403 384 1104	MT-POLYPRO	0.27U J	400V
	403 384 1124	MT-POLYPRO	0.27U J	400V
★ C424	403 370 1220	MT-POLYPRO	0.24U J	400V
	403 370 1200	MT-POLYPRO	0.24U J	400V
C460	403 183 7901	MT-POLYEST	0.1U K	100V
★ C462	403 083 8107	POLYPRO	0.01U J	630V
★ C463	403 083 8107	POLYPRO	0.01U J	630V
★ C464	403 188 0808	MT-POLYEST	2.2U J	100V
★ C465	403 188 0808	MT-POLYEST	2.2U J	100V
★ C466	403 188 0808	MT-POLYEST	2.2U J	100V
C468	403 258 8505	NP-ELECT	22U M	16V
★ C470	403 083 8800	POLYPRO	0.012U J	630V
C471	403 063 7809	POLYESTER	0.082U K	50V
	403 312 3507	POLYESTER	0.082U K	50V
C472	403 059 6205	POLYESTER	0.022U K	50V
	403 312 0506	POLYESTER	0.022U K	50V
C482	403 115 0703	ELECT	47U M	100V
C483	403 059 3808	POLYESTER	2200P K	50V
	403 312 0308	POLYESTER	2200P K	50V
C484	404 084 4204	ELECT	4.7U M	50V
C493	404 056 5307	NP-ELECT	2.2U M	100V
C504	403 209 7205	ELECT	2200U M	25V
C505	403 148 0404	ELECT	1000U M	25V
C507	403 148 1401	ELECT	220U M	50V
C508	403 161 8302	MT-POLYEST	0.47U K	100V
C510	403 035 2207	CERAMIC	15P K	500V
★ C601	404 089 1703	MT-POLYEST	0.22U M	275V
C602	403 075 7101	CERAMIC	1000P K	500V
C604	403 075 7101	CERAMIC	1000P K	500V
★ C608	403 222 1907	CERAMIC	2200P K	1K
	403 263 6305	CERAMIC	2200P K	1K
	403 232 0204	CERAMIC	2200P K	1K
★ C609	404 051 8303	ELECT	680U M	200V
	404 061 3206	ELECT	680U M	200V
★ C610	404 089 1505	MT-POLYEST	0.1U M	275V
C612	404 084 5102	POLYESTER	0.1UK	63V
C613	404 086 6503	POLYESTER	0.047U J	63V

Schematic Location	Part No.	Description
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C614	404 084 5003	POLYESTER	0.01UJ	63V
C619	403 069 8305	CERAMIC	0.01U Z	50V
C622	404 084 3405	ELECT 1	000U M	25V
C624	404 044 0703	ELECT	470U M	160V
C625	403 266 5008	CERAMIC	2700P K	1K
	403 232 0402	CERAMIC	2700P K	1K
C626	403 196 4201	ELECT	3300U M	16V
C628A	404 037 0703	ELECT	470U M	160V
C629	404 084 3009	ELECT	220U M	16V
C630	404 084 3801	ELECT	1U M	50V
★ C633	404 088 7706	CERAMIC	1500P M	250V
	404 088 7805	CERAMIC	1500P M	250V
C634	404 084 3207	ELECT	47U M	16V
★ C635	404 088 7706	CERAMIC	1500P M	250V
	404 088 7805	CERAMIC	1500P M	250V
C641	403 271 9602	CERAMIC	1000P K	1K
	403 262 1806	CERAMIC	1000P K	1K
C642	404 092 2001	ELECT	470U M	50V
C644	404 074 9103	ELECT	220U M	160V
C656	404 092 1905	ELECT	100U M	50V
C683	404 084 2705	ELECT	10U M	16V
C688	404 084 2804	ELECT	100U M	16V
C689	403 069 8305	CERAMIC	0.01U Z	50V
C693	404 087 1200	ELECT	0.1U M	50V

### DIODES

D401	407 222 4401	ZENER DIODE	1Z150
D402	408 008 2406	DIODE	1N4148
	407 013 4306	DIODE	1S2076A
	407 013 7109	DIODE	1S2473
D411	407 142 5908	DIODE	FMP-G3FS
D412	407 157 0806	DIODE	RS4FS LF-L1
D413	407 063 9603	ZENER DIODE	MTZJ9.1A
	407 099 6003	ZENER DIODE	MTZJ9.1B
★ D421	407 158 1307	ZENER DIODE	HZ11B2L
★ D422	407 158 1307	ZENER DIODE	HZ11B2L
D428	407 099 8007	ZENER DIODE	MTZJ20C
	407 055 1905	ZENER DIODE	RD20EB3
D429	408 008 2406	DIODE	1N4148
	407 013 4306	DIODE	1S2076A
	407 013 7109	DIODE	1S2473
D460	408 008 2406	DIODE	1N4148
	407 013 4306	DIODE	1S2076A
	407 013 7109	DIODE	1S2473
D461	407 221 5003	DIODE	FMC-G28SL
D462	407 099 6102	ZENER DIODE	MTZJ10B
D467	408 008 2406	DIODE	1N4148
	407 013 4306	DIODE	1S2076A
	407 013 7109	DIODE	1S2473
D468	408 008 2406	DIODE	1N4148
	407 013 4306	DIODE	1S2076A
	407 013 7109	DIODE	1S2473

Schematic Location	Part No.	Description
D481	407 124 6404	DIODE ERA18-04
	407 007 6606	DIODE ES1
	407 124 5506	DIODE RMPG06G
D482	407 011 4407	DIODE TVR1G
D486	408 008 2406	DIODE 1N4148
	407 013 4306	DIODE 1S2076A
	407 013 7109	DIODE 1S2473
D501	407 005 7308	DIODE EM01Z
	407 005 8602	DIODE ERA15-02
	407 088 6502	DIODE MPG06D
D502	407 118 2207	ZENER DIODE 1Z75
D503	407 100 0204	ZENER DIODE MTZJ36A
	407 100 0303	ZENER DIODE MTZJ36B
	407 100 0402	ZENER DIODE MTZJ36C
D504	407 100 0204	ZENER DIODE MTZJ36A
	407 100 0303	ZENER DIODE MTZJ36B
	407 100 0402	ZENER DIODE MTZJ36C
D511	407 118 2207	ZENER DIODE 1Z75
D512	407 118 2207	ZENER DIODE 1Z75
D513	407 063 8606	ZENER DIODE MTZJ5.1A
	407 099 5204	ZENER DIODE MTZJ5.1B
	407 063 8705	ZENER DIODE MTZJ5.1C
D514	407 063 8606	ZENER DIODE MTZJ5.1A
	407 099 5204	ZENER DIODE MTZJ5.1B
	407 063 8705	ZENER DIODE MTZJ5.1C
★ D601	407 124 9801	DIODE RBV-608
D611	408 008 2406	DIODE 1N4148
	407 013 4306	DIODE 1S2076A
	407 013 7109	DIODE 1S2473
★ D612	407 231 2801	PHOTO COUPLE PC123YC2
D613	407 063 9702	ZENER DIODE MTZJ9.1C
	407 057 9800	ZENER DIODE RD9.1EB3
D614	407 006 0100	DIODE ERA91-02
D621	407 106 2806	DIODE RU3YX
D622	408 008 2406	DIODE 1N4148
	407 013 4306	DIODE 1S2076A
	407 013 7109	DIODE 1S2473
D623	408 008 2406	DIODE 1N4148
	407 013 4306	DIODE 1S2076A
	407 013 7109	DIODE 1S2473
D624	407 168 6507	DIODE FMX-G12S
D625A	407 191 3900	DIODE FML-G16S
D627	408 008 2406	DIODE 1N4148
	407 013 4306	DIODE 1S2076A
	407 013 7109	DIODE 1S2473
D629	407 099 7208	ZENER DIODE MTZJ16A
	407 054 7007	ZENER DIODE RD16EB1
D631	407 007 7603	DIODE EU2
	407 007 7801	DIODE EU2Z
D635	407 099 9806	ZENER DIODE MTZJ33A
D641	407 099 4801	ZENER DIODE MTZJ4.3B
D643	407 222 4401	ZENER DIODE 1Z150
D649	408 008 2406	DIODE 1N4148
	407 013 4306	DIODE 1S2076A

Schematic Location	Part No.	Description
	407 013 7109	DIODE 1S2473
D652	408 008 2406	DIODE 1N4148
	407 013 4306	DIODE 1S2076A
	407 013 7109	DIODE 1S2473
D656	407 106 2806	DIODE RU3YX
D680	408 008 2406	DIODE 1N4148
	407 013 4306	DIODE 1S2076A
	407 013 7109	DIODE 1S2473
D683	408 008 2406	DIODE 1N4148
	407 013 4306	DIODE 1S2076A
	407 013 7109	DIODE 1S2473
D687	408 008 2406	DIODE 1N4148
	407 013 4306	DIODE 1S2076A
	407 013 7109	DIODE 1S2473
D693	407 099 5402	ZENER DIODE MTZJ6.2B
	407 057 2702	ZENER DIODE RD6.2EB2
D694	408 008 2406	DIODE 1N4148
	407 013 4306	DIODE 1S2076A
	407 013 7109	DIODE 1S2473

## INTEGRATED CIRCUITS

★ IC501	409 374 0607	IC LA7846N
★ IC601	409 172 8102	IC SE130NH
IC681	409 241 8309	IC TA78L05S
	409 066 7303	IC UPC78L05J

## COILS

★ LF601	645 012 0589	LINE FILTER
	645 026 8274	LINE FILTER
★ LF602	645 012 0589	LINE FILTER
	645 026 8274	LINE FILTER
L411	610 236 6440	JANPER LEAD
L413	610 078 5946	PIPE CORE
L414	610 078 6820	PIPE CORE
L421	645 058 6477	COIL, LINEARITY
L460	645 020 4043	INDUCTOR, 1500U
L461	610 000 0124	COIL
L461	645 037 7983	INDUCTOR, 125U
L462	610 000 0124	COIL
	645 037 7983	INDUCTOR, 125U
L463	610 078 5946	PIPE CORE
L464	610 078 5946	PIPE CORE
L602	645 005 0763	CORE, PIPE
L611	610 078 5946	PIPE CORE
	652 000 1725	CORE, PIPE
L612	610 078 5946	PIPE CORE
	652 000 1725	CORE, PIPE
L621	610 078 5946	PIPE CORE
	652 000 1725	CORE, PIPE
L623	610 078 5946	PIPE CORE
	652 000 1725	CORE, PIPE
L625	610 078 5946	PIPE CORE
	652 000 1725	CORE, PIPE

Schematic Location	Part No.	Description
L628	610 078 5946	PIPE CORE
	652 000 1725	CORE, PIPE
L641	645 007 8156	INDUCTOR, 82U K
	645 005 5423	INDUCTOR, 82U K
<b>TRANSISTORS</b>		
Q401	405 136 0205	TR 2SC5291S-AY
	405 136 0304	TR 2SC5291T-AY
★ Q402	406 017 4503	TR TT2140LS-YB11
Q460	405 029 6307	TR 2SB817-E
Q462	405 018 0507	TR 2SC3332-R
	405 018 0606	TR 2SC3332-S
★ Q601	405 178 9709	TR 2SK3505
Q611	405 013 6801	TR 2SC2274-E
	405 013 7006	TR 2SC2274-F
Q612	405 006 6504	TR 2SA984-E
	405 006 6702	TR 2SA984-F
Q613	405 013 6801	TR 2SC2274-E
	405 013 7006	TR 2SC2274-F
Q627	405 089 0000	TR 2SA1707-S
	405 089 0109	TR 2SA1707-T
	405 009 6907	TR 2SB985-S
	405 009 7003	TR 2SB985-T
Q635	405 011 8401	TR 2SC1740S-Q
	405 011 8500	TR 2SC1740S-R
	405 011 8609	TR 2SC1740S-S
	405 012 2002	TR 2SC1815-GR
	405 012 2101	TR 2SC1815-O
	405 012 2309	TR 2SC1815-Y
	405 157 0505	TR 2SC536NF-NPA
	405 151 8705	TR 2SC536NG-NPA
	405 020 7501	TR 2SC945A-PA
	405 020 7709	TR 2SC945A-QA
	405 020 7907	TR 2SC945A-RA
Q641	405 011 8401	TR 2SC1740S-Q
	405 011 8500	TR 2SC1740S-R
	405 011 8609	TR 2SC1740S-S
	405 012 2002	TR 2SC1815-GR
	405 012 2101	TR 2SC1815-O
	405 012 2309	TR 2SC1815-Y
	405 157 0505	TR 2SC536NF-NPA
	405 151 8705	TR 2SC536NG-NPA
	405 020 7501	TR 2SC945A-PA
	405 020 7709	TR 2SC945A-QA
	405 020 7907	TR 2SC945A-RA
Q642	405 011 8401	TR 2SC1740S-Q
	405 011 8500	TR 2SC1740S-R
	405 011 8609	TR 2SC1740S-S
	405 012 2002	TR 2SC1815-GR
	405 012 2309	TR 2SC1815-Y
	405 157 0505	TR 2SC536NF-NPA
	405 151 8705	TR 2SC536NG-NPA
	405 020 7501	TR 2SC945A-PA

Schematic Location	Part No.	Description
	405 020 7709	TR 2SC945A-QA
Q681	405 011 8401	TR 2SC1740S-Q
	405 011 8500	TR 2SC1740S-R
	405 011 8609	TR 2SC1740S-S
	405 012 2002	TR 2SC1815-GR
	405 012 2101	TR 2SC1815-O
	405 012 2309	TR 2SC1815-Y
	405 157 0505	TR 2SC536NF-NPA
	405 151 8705	TR 2SC536NG-NPA
	405 020 7501	TR 2SC945A-PA
	405 020 7709	TR 2SC945A-QA
	405 020 7907	TR 2SC945A-RA
Q688	406 000 6804	TR 2SA1015-GR(SAN)
	405 001 7605	TR 2SA1015-Y(SAN)
	405 004 3208	TR 2SA564A-R(CU)
	405 151 3304	TR 2SA608NF-NPA
	405 006 1806	TR 2SA933S-R
Q693	405 011 8401	TR 2SC1740S-Q
	405 011 8500	TR 2SC1740S-R
	405 011 8609	TR 2SC1740S-S
	405 012 2002	TR 2SC1815-GR
	405 012 2101	TR 2SC1815-O
	405 012 2309	TR 2SC1815-Y
	405 157 0505	TR 2SC536NF-NPA
	405 151 8705	TR 2SC536NG-NPA
	405 020 7501	TR 2SC945A-PA
	405 020 7709	TR 2SC945A-QA
	405 020 7907	TR 2SC945A-RA
Q695	405 001 7605	TR 2SA1015-Y(SAN)
	405 004 3208	TR 2SA564A-R(CU)
	405 004 4809	TR 2SA608-F-CTV-NP
<b>RESISTORS</b>		
R402	401 027 2303	CARBON 560 JA 1/6W
R405	401 027 2600	CARBON 5.6K JA 1/6W
★ R406	401 064 8702	OXIDE-MT 1K JA 2W
★ R407	401 068 6902	OXIDE-MT 56 JA 2W
★ R409	401 069 5607	OXIDE-MT 8.2 JA 2W
★ R410	401 062 5109	OXIDE-MT 56 JA 1W
★ R411	401 063 2008	OXIDE-MT 6.8K JA 1W
R412	401 024 9701	CARBON 12K JA 1/6W
R416	401 012 4503	CARBON 100 JA 1/4W
★ R421	401 148 7201	MT-FILM 1.8K FA 1/6W
★ R422	401 052 6802	MT-FILM 10K FA 1/6W
★ R423	401 053 2605	MT-FILM 3.3K FA 1/6W
★ R424	401 067 5302	OXIDE-MT 330 JA 2W
R428	401 025 1902	CARBON 15K JA 1/6W
R429	401 025 5405	CARBON 2.2 JA 1/6W
★ R461	402 002 9805	FUSIBLE RES 1 J- 2W
R462	401 202 1909	MT-FILM 680 FA 1/6W
R464	401 097 3903	MT-FILM 39K FA 1/6W
R466	401 053 3008	MT-FILM 470 FA 1/6W
R467	401 053 2605	MT-FILM 3.3K FA 1/6W

Schematic Location	Part No.	Description
R468	401 024 7004	CARBON 1K JA 1/6W
R470	401 025 8208	CARBON 22K JA 1/6W
R475	401 153 6602	MT-FILM 68K FA 1/6W
R480	401 006 7701	CARBON 1 JB 1/2W
R481	401 006 7701	CARBON 1 JB 1/2W
R482	401 021 0701	CARBON 56 JA 1/4W
R487	401 008 2605	CARBON 180K JA 1/2W
R488	401 021 3009	CARBON 5.6K JA 1/4W
R491	401 012 5708	CARBON 1K JA 1/4W
R493	401 019 2601	CARBON 39K GA 1/4W
R494	401 020 2607	CARBON 47K GA 1/4W
R495	401 024 9602	CARBON 12K GA 1/6W
★ R497	401 066 3002	OXIDE-MT 2.2 JA 2W
R501	401 026 6906	CARBON 3.9K GA 1/6W
★ R503	402 002 9805	FUSIBLE RES 1 J- 2W
★ R504	402 061 0201	FUSIBLE RES 1.5 J- 1/2W
★ R506	401 060 7402	OXIDE-MT 270 JA 1W
R507	401 008 6009	CARBON 22 JA 1/2W
★ R508	401 064 5701	OXIDE-MT 1.8 JA 2W
R509	401 053 4203	MT-FILM 5.6K FA 1/6W
R511	401 011 9004	CARBON 1 JB 1/4W
R512	401 026 6906	CARBON 3.9K GA 1/6W
R513	401 053 4203	MT-FILM 5.6K FA 1/6W
★ R601	402 057 0703	WIRE WOUND 1 KA 15W
	402 073 3405	WIRE WOUND 1 KA 15W
★ R602	402 000 1603	SOLID 3.3M MA 1/2W
	402 088 1502	RESISTER 3.3M JA 1/2W
	402 090 2108	RESISTER 3.3M JA 1/2W
R603	401 010 9203	CARBON 560K JA 1/2W
★ R604	401 066 3002	OXIDE-MT 2.2 JA 2W
R606	401 019 9600	CARBON 47 JA 1/4W
R607	401 016 1508	CARBON 22 JA 1/4W
R608	401 027 0507	CARBON 470K JA 1/6W
R609	401 025 8208	CARBON 22K JA 1/6W
R611	401 027 0309	CARBON 47K JA 1/6W
★ R612	402 001 8502	FUSIBLE RES 10 J- 1/2W
★ R613	401 228 0405	OXIDE-MT 0.27 JA 2W
R614	401 020 0900	CARBON 470 JB 1/4W
★ R615	401 228 0405	OXIDE-MT 0.27 JA 2W
R616	401 024 7400	CARBON 10K JA 1/6W
★ R617	402 001 8106	FUSIBLE RES 680 J- 1/4W
R618	401 012 5708	CARBON 1K JA 1/4W
R619	401 025 8208	CARBON 22K JA 1/6W
R621	401 026 9907	CARBON 4.7K JA 1/6W
R623	401 024 7400	CARBON 10K JA 1/6W
R624	401 024 7400	CARBON 10K JA 1/6W
R627	401 024 7400	CARBON 10K JA 1/6W
★ R628	401 065 2808	OXIDE-MT 120 JA 2W

Schematic Location	Part No.	Description
R629	401 024 7004	CARBON 1K JA 1/6W
★ R630	401 060 5002	OXIDE-MT 22K JA 1W
R631	401 022 3107	CARBON 6.8K JA 1/4W
R632	401 024 7004	CARBON 1K JA 1/6W
R634	401 027 0309	CARBON 47K JA 1/6W
★ R635	401 065 4604	OXIDE-MT 12K JA 2W
R641	401 024 7400	CARBON 10K JA 1/6W
R642	401 025 8208	CARBON 22K JA 1/6W
R646	401 024 7400	CARBON 10K JA 1/6W
R683	401 027 2600	CARBON 5.6K JA 1/6W
R686	401 018 1605	CARBON 33 JA 1/4W
R687	401 025 8208	CARBON 22K JA 1/6W
R688	401 024 9701	CARBON 12K JA 1/6W
R691	401 024 7400	CARBON 10K JA 1/6W
R692	401 027 0309	CARBON 47K JA 1/6W
R693	401 027 3201	CARBON 560K JA 1/6W
R694	401 024 7400	CARBON 10K JA 1/6W
R695	401 025 8208	CARBON 22K JA 1/6W

#### MISCELLANEOUS

A401	610 302 9887	ASSY, PWB, P/D-G7FAM
★ F601	423 029 8008	FUSE 125V 4A
	423 018 8101	FUSE 125V 4A
	423 007 1601	FUSE 125V 4A
	423 007 1809	FUSE 125V 4A
F601A	645 000 5077	HOLDER, FUSE
	645 016 0479	HOLDER, FUSE
F601B	645 000 5077	HOLDER, FUSE
	645 016 0479	HOLDER, FUSE
★ PS601	408 046 5209	TH PTDA1BF3R0Q100
★ RL601	645 011 2713	RELAY
	645 015 8629	RELAY
	645 052 5933	RELAY
T401	645 041 1083	TRANS, DRIVE
★ T402	645 057 0940	TRANS, FLYBACK
★ T601	645 057 1121	TRANS, POWER, PULSE
★ W601	645 023 1698	CORD, POWER
	645 056 9548	CORD, POWER-2.05MK

Schematic Location	Part No.	Description
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## AV SELECT PC BOARD

### CAPACITORS

C1001	404 084 2705	ELECT	10U M	16V
C1002	404 084 4006	ELECT	2.2U M	50V
C1003	404 084 4006	ELECT	2.2U M	50V
C1004	404 084 2705	ELECT	10U M	16V
C1005	404 084 4006	ELECT	2.2U M	50V
C1006	404 084 4006	ELECT	2.2U M	50V
C1008	404 084 4006	ELECT	2.2U M	50V
C1009	404 084 4006	ELECT	2.2U M	50V
C1054	403 279 0106	CERAMIC	0.1U Z	25V
C1055	404 084 2705	ELECT	10U M	16V
C1056	403 235 6203	CERAMIC	0.01U Z	50V
C1057	403 279 0106	CERAMIC	0.1U Z	25V
C1059	404 084 2705	ELECT	10U M	16V
C1201	404 084 5508	MT-POLYEST	0.1UJ	63V
C1204	404 084 2606	ELECT	470U M	10V
C1205	404 088 5702	ELECT	22U M	16V
C1206	403 235 4704	CERAMIC	330P K	50V
C1211	403 235 6203	CERAMIC	0.01U Z	50V
C1214	403 235 4704	CERAMIC	330P K	50V
C1223	404 084 5508	MT-POLYEST	0.1UJ	63V
C1231	404 084 2606	ELECT	470U M	10V
C1235	403 279 0106	CERAMIC	0.1U Z	25V
C1236	404 084 2606	ELECT	470U M	10V
C1238	403 235 6203	CERAMIC	0.01U Z	50V
C1241	403 235 0003	CERAMIC	33P J	50V
C1251	403 279 0106	CERAMIC	0.1U Z	25V
C1252	404 084 3207	ELECT	47U M	16V
C1253	404 085 5606	NP-ELECT	22U M	16V
C1254	404 085 5606	NP-ELECT	22U M	16V
C1281	403 279 0106	CERAMIC	0.1U Z	25V
C1282	404 084 2804	ELECT	100U M	16V
C1283	404 084 2804	ELECT	100U M	16V
C7003	403 235 0003	CERAMIC	33P J	50V
C7004	403 235 0003	CERAMIC	33P J	50V
C7005	404 084 2507	ELECT	47U M	10V
C7009	403 279 0106	CERAMIC	0.1U Z	25V
C7010	404 085 4203	ELECT	100U M	10V
C7011	403 235 0706	CERAMIC	120P J	50V
C7012	403 279 0106	CERAMIC	0.1U Z	25V
C7020	403 279 0106	CERAMIC	0.1U Z	25V
C7021	403 224 5507	CERAMIC	22P J	50V
C7022	404 085 5606	NP-ELECT	22U M	16V
C7023	404 085 4203	ELECT	100U M	10V
C7030	404 088 5702	ELECT	22U M	16V
C7031	404 085 4203	ELECT	100U M	10V
C7032	403 279 0106	CERAMIC	0.1U Z	25V
C7033	404 084 4006	ELECT	2.2U M	50V
C7034	404 085 5606	NP-ELECT	22U M	16V
C7035	403 224 5705	CERAMIC	1000P K	50V
C7036	404 084 6901	NP-ELECT	1U M	50V
C7038	403 093 7206	OS-SOLID	22U M	10V

Schematic Location	Part No.	Description
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C7039	403 279 0106	CERAMIC	0.1U Z	25V
C7041	403 279 0106	CERAMIC	0.1U Z	25V
C7101	403 093 7206	OS-SOLID	22U M	10V
C7102	403 093 7206	OS-SOLID	22U M	10V
C7103	403 279 0106	CERAMIC	0.1U Z	25V
C7104	403 224 5507	CERAMIC	22P J	50V
C7105	403 224 5507	CERAMIC	22P J	50V
C7106	403 279 0106	CERAMIC	0.1U Z	25V
C7107	403 279 0106	CERAMIC	0.1U Z	25V
C7108	403 093 7206	OS-SOLID	22U M	10V
C7109	403 279 0106	CERAMIC	0.1U Z	25V
C7110	403 093 6209	OS-SOLID	10U M	10V
C7111	403 279 0106	CERAMIC	0.1U Z	25V
C7112	403 279 0106	CERAMIC	0.1U Z	25V
C7113	403 235 0805	CERAMIC	150P J	50V
C7115	403 235 0805	CERAMIC	150P J	50V
C7116	403 279 0106	CERAMIC	0.1U Z	25V
C7118	403 314 6209	CERAMIC	2.2U K	16V
C7119	403 279 0106	CERAMIC	0.1U Z	25V
C7120	403 279 0106	CERAMIC	0.1U Z	25V
C7121	403 279 0106	CERAMIC	0.1U Z	25V
C7122	403 279 0106	CERAMIC	0.1U Z	25V
C7124	403 279 0106	CERAMIC	0.1U Z	25V
C7126	404 084 2705	ELECT	10U M	16V
C7127	403 279 0106	CERAMIC	0.1U Z	25V
C7128	403 279 0106	CERAMIC	0.1U Z	25V
C7129	403 279 0106	CERAMIC	0.1U Z	25V
C7130	403 279 0106	CERAMIC	0.1U Z	25V
C7131	403 279 0106	CERAMIC	0.1U Z	25V
C7133	403 093 6209	OS-SOLID	10U M	10V
C7134	403 279 0106	CERAMIC	0.1U Z	25V
C7135	403 093 7206	OS-SOLID	22U M	10V
C7136	403 283 6309	CERAMIC	1U K	10V
	403 309 1400	CERAMIC	1P Z	10V
	403 336 5600	CERAMIC	1.0U Z	10V
C7137	404 084 2507	ELECT	47U M	10V
C7138	403 279 0106	CERAMIC	0.1U Z	25V
C7139	403 279 0106	CERAMIC	0.1U Z	25V
C7140	404 084 2507	ELECT	47U M	10V
C7146	403 279 0106	CERAMIC	0.1U Z	25V
C7147	404 084 2507	ELECT	47U M	10V
C8201	404 084 2903	ELECT	1000U M	16V
C8202	404 084 3702	ELECT	0.47U M	50V
C8203	403 235 0904	CERAMIC	180P J	50V
C8204	403 234 9700	CERAMIC	12P J	50V
C8205	403 235 6203	CERAMIC	0.01U Z	50V
C8206	403 235 1406	CERAMIC	470P J	50V
C8207	403 235 0607	CERAMIC	100P J	50V
C8208	404 084 4204	ELECT	4.7U M	50V
C8209	404 084 6901	NP-ELECT	1U M	50V
C8210	403 235 5909	CERAMIC	8200P K	50V
C8211	404 084 3702	ELECT	0.47U M	50V
C8212	403 224 5903	CERAMIC	3300P K	50V
C8213	404 084 3801	ELECT	1U M	50V

Schematic Location	Part No.	Description
C8214	403 235 6203	CERAMIC 0.01U Z 50V
C8216	403 279 0106	CERAMIC 0.1U Z 25V
C8217	404 084 5508	MT-POLYEST 0.1UJ 63V
C8219	404 084 2903	ELECT 1 000U M 16V
C8227	403 235 1307	CERAMIC 390P J 50V
C8230	404 092 3701	MT-POLYEST 0.27U J 63V
C8231	403 235 6203	CERAMIC 0.01U Z 50V
C8232	403 235 6203	CERAMIC 0.01U Z 50V
C8233	403 309 1202	CERAMIC 0.056U K 16V
C8234	403 235 6203	CERAMIC 0.01U Z 50V
C8235	403 062 7107	POLYESTER 0.056U K 50V
	403 179 0503	POLYESTER 0.056U K 50V
C8236	403 235 4704	CERAMIC 330P K 50V
C8237	404 084 6901	NP-ELECT 1U M 50V
C8238	404 092 3701	MT-POLYEST 0.27U J 63V
C8239	403 235 5206	CERAMIC 820P K 50V
C8240	404 084 3801	ELECT 1U M 50V
C8241	403 057 0601	POLYESTER 0.01U K 50V
	403 179 3801	POLYESTER 0.01U K 50V
C8242	404 084 3207	ELECT 47U M 16V
C8243	404 084 3207	ELECT 47U M 16V

#### DIODES

D1054	407 206 5608	ZENER DIODE UDZS10B TE-17
D1057	407 206 5608	ZENER DIODE UDZS10B TE-17
D1211	407 206 5608	ZENER DIODE UDZS10B TE-17
D1212	407 206 5608	ZENER DIODE UDZS10B TE-17
D1281	407 149 0807	DIODE 1SS355 TE-17
D7100	407 149 0807	DIODE 1SS355 TE-17
D7101	407 231 8506	ZD UDZS3.0B-TE-17
D7102	407 149 0807	DIODE 1SS355 TE-17
D7103	407 149 0807	DIODE 1SS355 TE-17
D8230	407 149 0807	DIODE 1SS355 TE-17

#### INTEGRATED CIRCUITS

IC1201	409 419 5406	IC MM1313BD
IC1252	409 444 4722	IC NJM2534M-TE2
IC1281	409 124 5708	IC L78M09T-TL
IC7101	409 515 9803	IC UPD64083GF-3BA
IC7102	409 437 4801	IC L88M33TL-TL
IC7103	409 517 6107	IC UPC2925T-E2
IC8201	409 449 2901	IC CXA2019AQ
IC8230	409 441 8426	IC LA7217M-T-TRM

#### COILS

L1201	645 008 2276	INDUCTOR, 22U K
L7002	645 040 3101	INDUCTOR, 3.3U M
	645 026 1008	INDUCTOR, 3.3U M
L7003	645 040 3101	INDUCTOR, 3.3U M
	645 026 1008	INDUCTOR, 3.3U M
L7004	645 040 3101	INDUCTOR, 3.3U M
	645 026 1008	INDUCTOR, 3.3U M

Schematic Location	Part No.	Description
L7007	645 021 1607	INDUCTOR, 10U J
	645 032 8213	INDUCTOR, 10U J
L7061	645 025 7797	INDUCTOR, 120 OHM
L7101	645 040 3064	INDUCTOR, 10U K
	645 026 0964	INDUCTOR, 10U K
L7102	645 040 3064	INDUCTOR, 10U K
	645 026 0964	INDUCTOR, 10U K
L7103	645 040 3064	INDUCTOR, 10U K
	645 026 0964	INDUCTOR, 10U K
L7105	645 025 7797	INDUCTOR, 120 OHM
L7106	645 025 7797	INDUCTOR, 120 OHM
L7108	645 025 7797	INDUCTOR, 120 OHM
L7110	645 025 7797	INDUCTOR, 120 OHM
L7112	645 040 3101	INDUCTOR, 3.3U M
	645 026 1008	INDUCTOR, 3.3U M
L7119	645 021 1621	INDUCTOR, 15U J
	645 030 5627	INDUCTOR, 15U J
L7120	645 025 7797	INDUCTOR, 120 OHM
L7121	645 025 7797	INDUCTOR, 120 OHM
L7139	645 025 7797	INDUCTOR, 120 OHM
L7152	645 025 7797	INDUCTOR, 120 OHM
L7154	645 025 7797	INDUCTOR, 120 OHM
L7156	645 025 7797	INDUCTOR, 120 OHM
L7162	645 036 3894	INDUCTOR, 220 OHM
L7163	645 036 3894	INDUCTOR, 220 OHM
L7164	645 025 7797	INDUCTOR, 120 OHM
L7165	645 025 7797	INDUCTOR, 120 OHM
L8201	645 008 2221	INDUCTOR, 2.2U K
L8203	645 021 1768	INDUCTOR, 6.8U J
	645 037 1622	INDUCTOR, 6.8U J
L8218	645 008 2221	INDUCTOR, 2.2U K
L8220	401 150 6001	MT-GLAZE 0.000 ZA 1/10W
L8221	401 150 6001	MT-GLAZE 0.000 ZA 1/10W
L8227	645 021 1607	INDUCTOR, 10U J
	645 032 8213	INDUCTOR, 10U J

#### TRANSISTORS

Q1202	405 134 5925	TR 2SA1037AK T146 R
	405 147 2205	TR 2SA1037AK T146 S
	405 002 0308	TR 2SA1037K-T-96-R
	405 002 0407	TR 2SA1037K-T-96-S
	405 002 6726	TR 2SA1179-M6
	405 002 6924	TR 2SA1179-M7-TB
	405 163 1503	TR 2SA1179N-M6-TB
	405 163 2708	TR 2SA1179N-M7-TB
	405 173 9605	TR 2SA1235A1E
	405 173 9704	TR 2SA1235A1F
Q1232	405 014 4509	TR 2SC2412K-T-96-R
	405 014 4608	TR 2SC2412K-T-96-S
	405 015 8724	TR 2SC2812-L6-TB
	405 015 8922	TR 2SC2812-L7-TB
	405 163 1602	TR 2SC2812N-L6-TB
	405 163 1701	TR 2SC2812N-L7-TB

Schematic Location	Part No.	Description
Q1233	405 173 9803	TR 2SC3928A1R
	405 173 9902	TR 2SC3928A1S
	405 014 4509	TR 2SC2412K-T-96-R
	405 014 4608	TR 2SC2412K-T-96-S
	405 015 8724	TR 2SC2812-L6-TB
	405 015 8922	TR 2SC2812-L7-TB
	405 163 1602	TR 2SC2812N-L6-TB
Q1234	405 163 1701	TR 2SC2812N-L7-TB
	405 173 9803	TR 2SC3928A1R
	405 173 9902	TR 2SC3928A1S
	405 014 4509	TR 2SC2412K-T-96-R
	405 014 4608	TR 2SC2412K-T-96-S
	405 015 8724	TR 2SC2812-L6-TB
	405 015 8922	TR 2SC2812-L7-TB
Q7010	405 163 1602	TR 2SC2812N-L6-TB
	405 163 1701	TR 2SC2812N-L7-TB
	405 173 9803	TR 2SC3928A1R
	405 173 9902	TR 2SC3928A1S
	405 134 5925	TR 2SA1037AK T146 R
	405 147 2205	TR 2SA1037AK T146 S
	405 002 0308	TR 2SA1037K-T-96-R
Q7011	405 002 0407	TR 2SA1037K-T-96-S
	405 002 6726	TR 2SA1179-M6
	405 002 6924	TR 2SA1179-M7-TB
	405 163 1503	TR 2SA1179N-M6-TB
	405 163 2708	TR 2SA1179N-M7-TB
	405 173 9605	TR 2SA1235A1E
	405 173 9704	TR 2SA1235A1F
Q7012	405 014 4509	TR 2SC2412K-T-96-R
	405 014 4608	TR 2SC2412K-T-96-S
	405 015 8724	TR 2SC2812-L6-TB
	405 015 8922	TR 2SC2812-L7-TB
	405 163 1602	TR 2SC2812N-L6-TB
	405 163 1701	TR 2SC2812N-L7-TB
	405 173 9803	TR 2SC3928A1R
Q7013	405 173 9902	TR 2SC3928A1S
	405 134 5925	TR 2SA1037AK T146 R
	405 147 2205	TR 2SA1037AK T146 S
	405 002 0308	TR 2SA1037K-T-96-R
	405 002 0407	TR 2SA1037K-T-96-S
	405 002 6726	TR 2SA1179-M6
	405 002 6924	TR 2SA1179-M7-TB
	405 163 1503	TR 2SA1179N-M6-TB
	405 163 2708	TR 2SA1179N-M7-TB
	405 173 9605	TR 2SA1235A1E
	405 173 9704	TR 2SA1235A1F
	405 134 5925	TR 2SA1037AK T146 R
	405 147 2205	TR 2SA1037AK T146 S
	405 002 0308	TR 2SA1037K-T-96-R
	405 002 0407	TR 2SA1037K-T-96-S
	405 002 6726	TR 2SA1179-M6
	405 002 6924	TR 2SA1179-M7-TB
	405 163 1503	TR 2SA1179N-M6-TB
	405 163 2708	TR 2SA1179N-M7-TB
	405 173 9605	TR 2SA1235A1E
	405 173 9704	TR 2SA1235A1F

Schematic Location	Part No.	Description
Q7020	405 173 9605	TR 2SA1235A1E
	405 173 9704	TR 2SA1235A1F
	405 134 5925	TR 2SA1037AK T146 R
	405 147 2205	TR 2SA1037AK T146 S
	405 002 0308	TR 2SA1037K-T-96-R
	405 002 0407	TR 2SA1037K-T-96-S
	405 002 6726	TR 2SA1179-M6
Q7021	405 002 6924	TR 2SA1179-M7-TB
	405 163 1503	TR 2SA1179N-M6-TB
	405 163 2708	TR 2SA1179N-M7-TB
	405 173 9605	TR 2SA1235A1E
	405 173 9704	TR 2SA1235A1F
	405 014 4509	TR 2SC2412K-T-96-R
	405 014 4608	TR 2SC2412K-T-96-S
Q7022	405 015 8724	TR 2SC2812-L6-TB
	405 015 8922	TR 2SC2812-L7-TB
	405 163 1602	TR 2SC2812N-L6-TB
	405 163 1701	TR 2SC2812N-L7-TB
	405 173 9803	TR 2SC3928A1R
	405 173 9902	TR 2SC3928A1S
	405 134 5925	TR 2SA1037AK T146 R
Q7023	405 147 2205	TR 2SA1037AK T146 S
	405 002 0308	TR 2SA1037K-T-96-R
	405 002 0407	TR 2SA1037K-T-96-S
	405 002 6726	TR 2SA1179-M6
	405 002 6924	TR 2SA1179-M7-TB
	405 163 1503	TR 2SA1179N-M6-TB
	405 163 2708	TR 2SA1179N-M7-TB
Q7030	405 173 9605	TR 2SA1235A1E
	405 173 9704	TR 2SA1235A1F
	405 134 5925	TR 2SA1037AK T146 R
	405 147 2205	TR 2SA1037AK T146 S
	405 002 0308	TR 2SA1037K-T-96-R
	405 002 0407	TR 2SA1037K-T-96-S
	405 002 6726	TR 2SA1179-M6
Q7031	405 002 6924	TR 2SA1179-M7-TB
	405 163 1503	TR 2SA1179N-M6-TB
	405 163 2708	TR 2SA1179N-M7-TB
	405 173 9605	TR 2SA1235A1E
	405 173 9704	TR 2SA1235A1F
	405 014 4509	TR 2SC2412K-T-96-R
	405 014 4608	TR 2SC2412K-T-96-S
	405 015 8724	TR 2SC2812-L6-TB
	405 015 8922	TR 2SC2812-L7-TB



Schematic Location	Part No.	Description
Q7032	Q7031 (Cont.) 405 163 1602	TR 2SC2812N-L6-TB
	405 163 1701	TR 2SC2812N-L7-TB
	405 173 9803	TR 2SC3928A1R
	405 173 9902	TR 2SC3928A1S
	405 014 4509	TR 2SC2412K-T-96-R
	405 014 4608	TR 2SC2412K-T-96-S
	405 015 8724	TR 2SC2812-L6-TB
	405 015 8922	TR 2SC2812-L7-TB
	405 163 1602	TR 2SC2812N-L6-TB
	405 163 1701	TR 2SC2812N-L7-TB
Q7033	405 173 9803	TR 2SC3928A1R
	405 173 9902	TR 2SC3928A1S
	405 014 4509	TR 2SC2412K-T-96-R
	405 014 4608	TR 2SC2412K-T-96-S
	405 015 8724	TR 2SC2812-L6-TB
	405 015 8922	TR 2SC2812-L7-TB
	405 163 1602	TR 2SC2812N-L6-TB
	405 163 1701	TR 2SC2812N-L7-TB
	405 173 9803	TR 2SC3928A1R
	405 173 9902	TR 2SC3928A1S
Q7034	405 134 5925	TR 2SA1037AK T146 R
	405 147 2205	TR 2SA1037AK T146 S
	405 002 0308	TR 2SA1037K-T-96-R
	405 002 0407	TR 2SA1037K-T-96-S
	405 002 6726	TR 2SA1179-M6
	405 002 6924	TR 2SA1179-M7-TB
	405 163 1503	TR 2SA1179N-M6-TB
	405 163 2708	TR 2SA1179N-M7-TB
	405 173 9605	TR 2SA1235A1E
	405 173 9704	TR 2SA1235A1F
Q7035	405 014 4509	TR 2SC2412K-T-96-R
	405 014 4608	TR 2SC2412K-T-96-S
	405 015 8724	TR 2SC2812-L6-TB
	405 015 8922	TR 2SC2812-L7-TB
	405 163 1602	TR 2SC2812N-L6-TB
	405 163 1701	TR 2SC2812N-L7-TB
	405 173 9803	TR 2SC3928A1R
	405 173 9902	TR 2SC3928A1S
	405 014 4509	TR 2SC2412K-T-96-R
	405 014 4608	TR 2SC2412K-T-96-S
Q7036	405 015 8724	TR 2SC2812-L6-TB
	405 015 8922	TR 2SC2812-L7-TB
	405 163 1602	TR 2SC2812N-L6-TB
	405 163 1701	TR 2SC2812N-L7-TB
	405 173 9803	TR 2SC3928A1R
	405 173 9902	TR 2SC3928A1S
	405 014 4509	TR 2SC2412K-T-96-R
	405 014 4608	TR 2SC2412K-T-96-S
	405 015 8724	TR 2SC2812-L6-TB
	405 015 8922	TR 2SC2812-L7-TB
Q7100	405 163 1602	TR 2SC2812N-L6-TB
	405 163 1701	TR 2SC2812N-L7-TB
	405 173 9803	TR 2SC3928A1R
	405 173 9902	TR 2SC3928A1S
	405 134 5925	TR 2SA1037AK T146 R
	405 147 2205	TR 2SA1037AK T146 S
	405 002 0308	TR 2SA1037K-T-96-R
	405 002 0407	TR 2SA1037K-T-96-S
	405 002 6726	TR 2SA1179-M6
	405 002 6924	TR 2SA1179-M7-TB
	405 163 1503	TR 2SA1179N-M6-TB
	405 163 2708	TR 2SA1179N-M7-TB

Schematic Location	Part No.	Description
Q7101	405 173 9605	TR 2SA1235A1E
	405 173 9704	TR 2SA1235A1F
	405 134 5925	TR 2SA1037AK T146 R
	405 147 2205	TR 2SA1037AK T146 S
	405 002 0308	TR 2SA1037K-T-96-R
	405 002 0407	TR 2SA1037K-T-96-S
	405 002 6726	TR 2SA1179-M6
	405 002 6924	TR 2SA1179-M7-TB
	405 163 1503	TR 2SA1179N-M6-TB
	405 163 2708	TR 2SA1179N-M7-TB
Q8227	405 173 9605	TR 2SA1235A1E
	405 173 9704	TR 2SA1235A1F
	405 014 4509	TR 2SC2412K-T-96-R
	405 014 4608	TR 2SC2412K-T-96-S
	405 015 8724	TR 2SC2812-L6-TB
	405 015 8922	TR 2SC2812-L7-TB
	405 163 1602	TR 2SC2812N-L6-TB
	405 163 1701	TR 2SC2812N-L7-TB
	405 173 9803	TR 2SC3928A1R
	405 173 9902	TR 2SC3928A1S
Q8230	405 014 4509	TR 2SC2412K-T-96-R
	405 014 4608	TR 2SC2412K-T-96-S
	405 015 8724	TR 2SC2812-L6-TB
	405 015 8922	TR 2SC2812-L7-TB
	405 163 1602	TR 2SC2812N-L6-TB
	405 163 1701	TR 2SC2812N-L7-TB
	405 173 9803	TR 2SC3928A1R
	405 173 9902	TR 2SC3928A1S
	405 014 4509	TR 2SC2412K-T-96-R
	405 014 4608	TR 2SC2412K-T-96-S
Q8231	405 015 8724	TR 2SC2812-L6-TB
	405 015 8922	TR 2SC2812-L7-TB
	405 163 1602	TR 2SC2812N-L6-TB
	405 163 1701	TR 2SC2812N-L7-TB
	405 173 9803	TR 2SC3928A1R
	405 173 9902	TR 2SC3928A1S
	405 014 4509	TR 2SC2412K-T-96-R
	405 014 4608	TR 2SC2412K-T-96-S
	405 015 8724	TR 2SC2812-L6-TB
	405 015 8922	TR 2SC2812-L7-TB
Q8232	405 163 1602	TR 2SC2812N-L6-TB
	405 163 1701	TR 2SC2812N-L7-TB
	405 173 9803	TR 2SC3928A1R
	405 173 9902	TR 2SC3928A1S
	405 134 5925	TR 2SA1037AK T146 R
	405 147 2205	TR 2SA1037AK T146 S
	405 002 0308	TR 2SA1037K-T-96-R
	405 002 0407	TR 2SA1037K-T-96-S
	405 002 6726	TR 2SA1179-M6
	405 002 6924	TR 2SA1179-M7-TB
Q8233	405 163 1503	TR 2SA1179N-M6-TB
	405 163 2708	TR 2SA1179N-M7-TB
	405 173 9605	TR 2SA1235A1E
	405 173 9704	TR 2SA1235A1F
	405 014 4509	TR 2SC2412K-T-96-R
	405 014 4608	TR 2SC2412K-T-96-S
	405 015 8724	TR 2SC2812-L6-TB
	405 015 8922	TR 2SC2812-L7-TB
	405 163 1602	TR 2SC2812N-L6-TB
	405 163 1701	TR 2SC2812N-L7-TB
	405 173 9803	TR 2SC3928A1R
	405 173 9902	TR 2SC3928A1S



Schematic Location	Part No.	Description
Q8234	405 014 4509	TR 2SC2412K-T-96-R
	405 014 4608	TR 2SC2412K-T-96-S
	405 015 8724	TR 2SC2812-L6-TB
	405 015 8922	TR 2SC2812-L7-TB
	405 163 1602	TR 2SC2812N-L6-TB
	405 163 1701	TR 2SC2812N-L7-TB
	405 173 9803	TR 2SC3928A1R
Q8235	405 173 9902	TR 2SC3928A1S
	405 014 4509	TR 2SC2412K-T-96-R
	405 014 4608	TR 2SC2412K-T-96-S
	405 015 8724	TR 2SC2812-L6-TB
	405 015 8922	TR 2SC2812-L7-TB
	405 163 1602	TR 2SC2812N-L6-TB
	405 163 1701	TR 2SC2812N-L7-TB
Q8236	405 173 9803	TR 2SC3928A1R
	405 173 9902	TR 2SC3928A1S
	405 014 4509	TR 2SC2412K-T-96-R
	405 014 4608	TR 2SC2412K-T-96-S
	405 015 8724	TR 2SC2812-L6-TB
	405 015 8922	TR 2SC2812-L7-TB
	405 163 1602	TR 2SC2812N-L6-TB
Q8237	405 163 1701	TR 2SC2812N-L7-TB
	405 173 9803	TR 2SC3928A1R
	405 173 9902	TR 2SC3928A1S
	405 134 5925	TR 2SA1037AK T146 R
	405 147 2205	TR 2SA1037AK T146 S
	405 002 0308	TR 2SA1037K-T-96-R
	405 002 0407	TR 2SA1037K-T-96-S
Q8238	405 002 6726	TR 2SA1179-M6
	405 002 6924	TR 2SA1179-M7-TB
	405 163 1503	TR 2SA1179N-M6-TB
	405 163 2708	TR 2SA1179N-M7-TB
	405 173 9605	TR 2SA1235A1E
	405 173 9704	TR 2SA1235A1F
	405 134 5925	TR 2SA1037AK T146 R
Q8239	405 147 2205	TR 2SA1037AK T146 S
	405 002 0308	TR 2SA1037K-T-96-R
	405 002 0407	TR 2SA1037K-T-96-S
	405 002 6726	TR 2SA1179-M6
	405 002 6924	TR 2SA1179-M7-TB
	405 163 1503	TR 2SA1179N-M6-TB
	405 163 2708	TR 2SA1179N-M7-TB
Q8239	405 173 9605	TR 2SA1235A1E
	405 173 9704	TR 2SA1235A1F
	405 014 4509	TR 2SC2412K-T-96-R
	405 014 4608	TR 2SC2412K-T-96-S
	405 015 8724	TR 2SC2812-L6-TB
	405 015 8922	TR 2SC2812-L7-TB
	405 163 1602	TR 2SC2812N-L6-TB
Q8239	405 163 1701	TR 2SC2812N-L7-TB
	405 173 9803	TR 2SC3928A1R
	405 173 9902	TR 2SC3928A1S

Schematic Location	Part No.	Description
Q8240	405 014 4509	TR 2SC2412K-T-96-R
	405 014 4608	TR 2SC2412K-T-96-S
	405 015 8724	TR 2SC2812-L6-TB
	405 015 8922	TR 2SC2812-L7-TB
	405 163 1602	TR 2SC2812N-L6-TB
	405 163 1701	TR 2SC2812N-L7-TB
	405 173 9803	TR 2SC3928A1R
Q8240	405 173 9902	TR 2SC3928A1S
RESISTORS		
R1001	401 256 2709	MT-GLAZE 75 JA 1/10W
R1002	401 162 2909	MT-GLAZE 220 JA 1/10W
R1003	401 162 3807	MT-GLAZE 470K JA 1/10W
R1004	401 162 2800	MT-GLAZE 1.8K JA 1/10W
R1005	401 162 3807	MT-GLAZE 470K JA 1/10W
R1006	401 162 2800	MT-GLAZE 1.8K JA 1/10W
R1007	401 256 2709	MT-GLAZE 75 JA 1/10W
R1008	401 162 2909	MT-GLAZE 220 JA 1/10W
R1009	401 162 3807	MT-GLAZE 470K JA 1/10W
R1010	401 162 2800	MT-GLAZE 1.8K JA 1/10W
R1011	401 162 3807	MT-GLAZE 470K JA 1/10W
R1012	401 162 2800	MT-GLAZE 1.8K JA 1/10W
R1015	401 162 3807	MT-GLAZE 470K JA 1/10W
R1016	401 162 2800	MT-GLAZE 1.8K JA 1/10W
R1017	401 162 3807	MT-GLAZE 470K JA 1/10W
R1018	401 162 2800	MT-GLAZE 1.8K JA 1/10W
R1051	401 256 2709	MT-GLAZE 75 JA 1/10W
R1052	401 162 2909	MT-GLAZE 220 JA 1/10W
R1056	401 256 2709	MT-GLAZE 75 JA 1/10W
R1057	401 162 2909	MT-GLAZE 220 JA 1/10W
R1058	401 162 3005	MT-GLAZE 22K JA 1/10W
R1059	401 150 6209	MT-GLAZE 1K JA 1/10W
R1060	401 256 2709	MT-GLAZE 75 JA 1/10W
R1061	401 162 2909	MT-GLAZE 220 JA 1/10W
R1062	401 256 2709	MT-GLAZE 75 JA 1/10W
R1063	401 162 2909	MT-GLAZE 220 JA 1/10W
R1064	401 162 3005	MT-GLAZE 22K JA 1/10W
R1065	401 150 6209	MT-GLAZE 1K JA 1/10W
R1202	401 256 4109	MT-GLAZE 56 JA 1/10W
R1203	401 256 4109	MT-GLAZE 56 JA 1/10W
R1204	401 256 4109	MT-GLAZE 56 JA 1/10W
R1205	401 256 4109	MT-GLAZE 56 JA 1/10W
R1206	401 150 6100	MT-GLAZE 2.2K JA 1/10W
R1209	401 150 6209	MT-GLAZE 1K JA 1/10W
R1214	401 255 6500	MT-GLAZE 100 JA 1/10W
R1216	401 255 6500	MT-GLAZE 100 JA 1/10W
R1217	401 255 6500	MT-GLAZE 100 JA 1/10W
R1219	401 256 4109	MT-GLAZE 56 JA 1/10W
R1220	401 256 4109	MT-GLAZE 56 JA 1/10W
R1228	401 256 4109	MT-GLAZE 56 JA 1/10W
R1229	401 256 4109	MT-GLAZE 56 JA 1/10W
R1239	401 256 4109	MT-GLAZE 56 JA 1/10W
R1240	401 150 5905	MT-GLAZE 10K JA 1/10W

Schematic Location	Part No.	Description
R1241	401 150 6209	MT-GLAZE 1K JA 1/10W
R1242	401 256 4109	MT-GLAZE 56 JA 1/10W
R1243	401 150 6209	MT-GLAZE 1K JA 1/10W
R1244	401 256 4109	MT-GLAZE 56 JA 1/10W
R1245	401 256 4109	MT-GLAZE 56 JA 1/10W
R1246	401 150 6209	MT-GLAZE 1K JA 1/10W
R1247	401 256 4109	MT-GLAZE 56 JA 1/10W
R7010	401 150 6209	MT-GLAZE 1K JA 1/10W
R7011	401 162 3708	MT-GLAZE 4.7K JA 1/10W
R7012	401 162 4002	MT-GLAZE 560 JA 1/10W
R7013	401 162 4101	MT-GLAZE 5.6K JA 1/10W
R7014	401 150 6209	MT-GLAZE 1K JA 1/10W
R7015	401 162 2909	MT-GLAZE 220 JA 1/10W
R7016	401 256 0002	MT-GLAZE 120 JA 1/10W
R7017	401 162 3609	MT-GLAZE 470 JA 1/10W
R7018	401 256 5601	MT-GLAZE 47 JA 1/10W
R7019	401 150 6209	MT-GLAZE 1K JA 1/10W
R7020	401 150 6209	MT-GLAZE 1K JA 1/10W
R7021	401 162 3708	MT-GLAZE 4.7K JA 1/10W
R7022	401 162 4002	MT-GLAZE 560 JA 1/10W
R7023	401 162 4101	MT-GLAZE 5.6K JA 1/10W
R7024	401 162 2909	MT-GLAZE 220 JA 1/10W
R7025	401 150 6209	MT-GLAZE 1K JA 1/10W
R7026	401 162 3609	MT-GLAZE 470 JA 1/10W
R7027	401 162 2909	MT-GLAZE 220 JA 1/10W
R7028	401 256 5601	MT-GLAZE 47 JA 1/10W
R7029	401 150 6209	MT-GLAZE 1K JA 1/10W
R7030	401 256 2907	MT-GLAZE 150 JA 1/10W
R7031	401 150 6100	MT-GLAZE 2.2K JA 1/10W
R7032	401 256 6905	MT-GLAZE 680 JA 1/10W
R7033	401 256 0309	MT-GLAZE 820 JA 1/10W
R7034	401 150 6100	MT-GLAZE 2.2K JA 1/10W
R7035	401 256 4109	MT-GLAZE 56 JA 1/10W
R7036	401 256 7803	MT-GLAZE 390K JA 1/10W
R7037	401 162 4101	MT-GLAZE 5.6K JA 1/10W
R7038	401 162 3104	MT-GLAZE 3.3K JA 1/10W
R7039	401 162 2909	MT-GLAZE 220 JA 1/10W
R7040	401 255 9501	MT-GLAZE 220K JA 1/10W
R7041	401 256 6301	MT-GLAZE 47K JA 1/10W
R7042	401 150 6100	MT-GLAZE 2.2K JA 1/10W
R7043	401 162 3609	MT-GLAZE 470 JA 1/10W
R7044	401 150 6209	MT-GLAZE 1K JA 1/10W
R7045	401 162 3708	MT-GLAZE 4.7K JA 1/10W
R7046	401 255 6500	MT-GLAZE 100 JA 1/10W
R7047	401 150 6100	MT-GLAZE 2.2K JA 1/10W
R7100	401 256 0002	MT-GLAZE 120 JA 1/10W
R7101	401 162 2909	MT-GLAZE 220 JA 1/10W
R7102	401 162 3609	MT-GLAZE 470 JA 1/10W
R7103	401 150 6209	MT-GLAZE 1K JA 1/10W
R7106	401 162 3708	MT-GLAZE 4.7K JA 1/10W
R7107	401 255 6500	MT-GLAZE 100 JA 1/10W
R7108	401 255 6500	MT-GLAZE 100 JA 1/10W
R7111	401 162 3401	MT-GLAZE 39K JA 1/10W
R7112	401 162 3708	MT-GLAZE 4.7K JA 1/10W

Schematic Location	Part No.	Description
R7113	401 162 3401	MT-GLAZE 39K JA 1/10W
R8201	401 256 5304	MT-GLAZE 56K JA 1/10W
R8202	401 162 2800	MT-GLAZE 1.8K JA 1/10W
R8203	401 152 3206	MT-GLAZE 330 JA 1/10W
R8205	401 255 6500	MT-GLAZE 100 JA 1/10W
R8206	401 162 2909	MT-GLAZE 220 JA 1/10W
R8208	401 255 6500	MT-GLAZE 100 JA 1/10W
R8209	401 255 6500	MT-GLAZE 100 JA 1/10W
R8210	401 256 1405	MT-GLAZE 330K JA 1/10W
R8211	401 152 3206	MT-GLAZE 330 JA 1/10W
R8212	401 256 0101	MT-GLAZE 8.2K JA 1/10W
R8213	401 264 1909	MT-GLAZE 10K FA 1/10W
R8215	401 256 4109	MT-GLAZE 56 JA 1/10W
R8216	401 256 4109	MT-GLAZE 56 JA 1/10W
R8217	401 256 4109	MT-GLAZE 56 JA 1/10W
R8227	401 150 6209	MT-GLAZE 1K JA 1/10W
R8228	401 162 3005	MT-GLAZE 22K JA 1/10W
R8229	401 162 3005	MT-GLAZE 22K JA 1/10W
R8230	401 162 3807	MT-GLAZE 470K JA 1/10W
R8231	401 255 6005	MT-GLAZE 1M JA 1/10W
R8232	401 150 6100	MT-GLAZE 2.2K JA 1/10W
R8233	401 150 6100	MT-GLAZE 2.2K JA 1/10W
R8234	401 256 3607	MT-GLAZE 15K JA 1/10W
R8235	401 256 7308	MT-GLAZE 6.8K JA 1/10W
R8236	401 150 5905	MT-GLAZE 10K JA 1/10W
R8237	401 150 6209	MT-GLAZE 1K JA 1/10W
R8238	401 150 5905	MT-GLAZE 10K JA 1/10W
R8239	401 256 3508	MT-GLAZE 150K JA 1/10W
R8240	401 162 4002	MT-GLAZE 560 JA 1/10W
R8241	401 162 3104	MT-GLAZE 3.3K JA 1/10W
R8242	401 150 6209	MT-GLAZE 1K JA 1/10W
R8243	401 256 7605	MT-GLAZE 3.9K JA 1/10W
R8244	401 162 4002	MT-GLAZE 560 JA 1/10W
R8245	401 162 4002	MT-GLAZE 560 JA 1/10W
R8246	401 256 7605	MT-GLAZE 3.9K JA 1/10W
R8247	401 150 5905	MT-GLAZE 10K JA 1/10W
R8248	401 150 5806	MT-GLAZE 100K JA 1/10W
R8249	401 162 3104	MT-GLAZE 3.3K JA 1/10W

#### MISCELLANEOUS

A1200	610 302 9917	ASSY, PWB, AV VIDEO-G7FAM
	610 303 1057	ASSY, PWB, AV-G7FAM
K1001	645 057 1725	TERMINAL, BOARD
K1051	645 041 1847	SOCKET, DIN 4PX2
T7010	645 028 2454	FILTER, LP 6MHZ
T7020	645 028 2454	FILTER, LP 6MHZ
T7030	645 028 2447	FILTER, LP 6MHZ
VR7001	645 003 5715	VR, SEMI, 470 N
X7100	610 221 3126	CRYSTAL OSCILLATOR
X8201	645 024 8788	OSC, CRYSTAL 3.579545MHZ
X8202	610 012 0532	OSC, CERAMIC 500.0KHZ
X8230	645 006 3459	OSC, CERAMIC 500.0KHZ

Schematic Location	Part No.	Description
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## VIDEO PC BOARD

### CAPACITORS

C2301	404 084 2705	ELECT	10U M	16V
C2302	403 279 0106	CERAMIC	0.1U Z	25V
C2313	404 084 2903	ELECT	1000U M	16V
C2314	404 084 2903	ELECT	1000U M	16V
C2315	403 279 0106	CERAMIC	0.1U Z	25V
C2316	403 279 0106	CERAMIC	0.1U Z	25V
C2317	404 085 5002	ELECT	47U M	25V
C2318	404 085 4203	ELECT	100U M	10V
C2319	403 279 0106	CERAMIC	0.1U Z	25V
C2320	403 279 0106	CERAMIC	0.1U Z	25V
C2321	404 084 2507	ELECT	47U M	10V
C2323	404 092 9208	ELECT	1000U M	6.3V
C2324	404 092 9208	ELECT	1000U M	6.3V
C2325	403 224 5705	CERAMIC	1000P K	50V
C2327	401 150 6001	MT-GLAZE	0.000 ZA	1/10W
C2328	404 084 3306	ELECT	470U M	16V
C2329	403 279 0106	CERAMIC	0.1U Z	25V
C2330	404 084 2903	ELECT	1000U M	16V
C2331	404 084 2705	ELECT	10U M	16V
C2332	404 084 3801	ELECT	1U M	50V
C2333	403 056 7304	POLYESTER	1000P J	50V
C2333	403 178 9200	POLYESTER	1000P J	50V
C2334	403 224 6108	CERAMIC	0.01U K	50V
C2336	403 235 0409	CERAMIC	68P J	50V
C2339	404 084 3108	ELECT	330U M	16V
C2341	404 085 5002	ELECT	47U M	25V
C2342	403 354 2803	POLYPRO	0.1U J	50V
C2343	404 084 5508	MT-POLYEST	0.1UJ	63V
C2344	404 084 5508	MT-POLYEST	0.1UJ	63V
C2345	403 279 0106	CERAMIC	0.1U Z	25V
C2346	404 084 3306	ELECT	470U M	16V
C2371	403 235 5206	CERAMIC	820P K	50V
C2372	404 084 3207	ELECT	47U M	16V
C2373	403 279 0106	CERAMIC	0.1U Z	25V
C2380	404 084 3801	ELECT	1U M	50V
C2500	404 091 6604	ELECT	4.7U M	25V
C2501	403 279 0106	CERAMIC	0.1U Z	25V
C2502	404 084 2705	ELECT	10U M	16V
C2505	403 279 0106	CERAMIC	0.1U Z	25V
C2506	404 084 2804	ELECT	100U M	16V
C2507	403 279 0106	CERAMIC	0.1U Z	25V
C2508	403 279 0106	CERAMIC	0.1U Z	25V
C2509	403 279 0106	CERAMIC	0.1U Z	25V
C2510	403 063 2309	POLYESTER	0.068U K	50V
	403 179 0107	POLYESTER	0.068U K	50V
	403 312 3002	POLYESTER	0.068U K	50V
C2511	403 224 5606	CERAMIC	2700P K	50V
C2512	403 235 0607	CERAMIC	100P J	50V
C2513	404 084 3207	ELECT	47U M	16V
C2515	404 084 2705	ELECT	10U M	16V
C2521	403 279 0106	CERAMIC	0.1U Z	25V

Schematic Location	Part No.	Description
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C2522	403 279 0106	CERAMIC	0.1U Z	25V
C2523	403 279 0106	CERAMIC	0.1U Z	25V
C2524	403 279 0106	CERAMIC	0.1U Z	25V
C2525	403 279 0106	CERAMIC	0.1U Z	25V
C2526	403 279 0106	CERAMIC	0.1U Z	25V
C2527	403 325 4706	CERAMIC	0.047U K	25V
C2530	404 084 5706	MT-POLYEST	0.47UJ	63V
C2531	404 084 4006	ELECT	2.2U M	50V
C2532	403 279 0106	CERAMIC	0.1U Z	25V
C2533	404 092 9208	ELECT	1000U M	6.3V
C2534	404 084 5508	MT-POLYEST	0.1UJ	63V
C2535	404 084 5508	MT-POLYEST	0.1UJ	63V
C2536	404 084 5508	MT-POLYEST	0.1UJ	63V
C2537	403 279 0106	CERAMIC	0.1U Z	25V
C2538	403 279 0106	CERAMIC	0.1U Z	25V
C2539	403 279 0106	CERAMIC	0.1U Z	25V
C2543	404 087 1200	ELECT	0.1U M	50V
C2544	404 087 1200	ELECT	0.1U M	50V
C2545	404 087 1200	ELECT	0.1U M	50V
C2613	404 084 2804	ELECT	100U M	16V
C2910	404 084 3702	ELECT	0.47U M	50V
C2911	404 084 3702	ELECT	0.47U M	50V
C2912	404 084 3702	ELECT	0.47U M	50V
C2913	404 085 4203	ELECT	100U M	10V
C2914	403 279 0106	CERAMIC	0.1U Z	25V
C2915	403 279 0106	CERAMIC	0.1U Z	25V
C2916	404 084 6901	NP-ELECT	1U M	50V
C2917	403 235 6203	CERAMIC	0.01U Z	50V
C2920	404 085 4203	ELECT	100U M	10V
C2921	403 279 0106	CERAMIC	0.1U Z	25V
C2922	403 279 0106	CERAMIC	0.1U Z	25V
C2923	403 279 0106	CERAMIC	0.1U Z	25V
C2924	403 279 0106	CERAMIC	0.1U Z	25V
C2925	403 279 0106	CERAMIC	0.1U Z	25V
C2926	403 279 0106	CERAMIC	0.1U Z	25V
C2927	403 279 0106	CERAMIC	0.1U Z	25V
C2928	403 279 0106	CERAMIC	0.1U Z	25V
C2930	404 089 6906	NP-ELECT	0.47U M	50V
C2931	404 089 6906	NP-ELECT	0.47U M	50V
C2932	404 089 6906	NP-ELECT	0.47U M	50V
C2933	404 089 6906	NP-ELECT	0.47U M	50V
C2934	404 089 6906	NP-ELECT	0.47U M	50V
C2935	403 279 0106	CERAMIC	0.1U Z	25V
C2936	403 279 0106	CERAMIC	0.1U Z	25V
C2937	403 279 0106	CERAMIC	0.1U Z	25V
C2938	403 279 0106	CERAMIC	0.1U Z	25V
C2939	403 279 0106	CERAMIC	0.1U Z	25V
C2940	403 279 0106	CERAMIC	0.1U Z	25V
C2941	404 085 4203	ELECT	100U M	10V

Schematic Location	Part No.	Description
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#### DIODES

D2301	407 092 9526	DIODE SB07-03C-TB
D2302	407 149 0807	DIODE 1SS355 TE-17
D2303	407 149 0807	DIODE 1SS355 TE-17
D2320	407 149 0807	DIODE 1SS355 TE-17
D2321	407 149 0807	DIODE 1SS355 TE-17
D2330	407 092 9526	DIODE SB07-03C-TB
D2342	407 092 9526	DIODE SB07-03C-TB
D2343	407 149 0807	DIODE 1SS355 TE-17
D2501	407 206 5608	ZENER DIODE UDZS10B TE-17
D2502	407 206 5608	ZENER DIODE UDZS10B TE-17
D2503	407 206 5608	ZENER DIODE UDZS10B TE-17
D2510	407 149 0807	DIODE 1SS355 TE-17
D2511	407 149 0807	DIODE 1SS355 TE-17
D2910	407 206 5608	ZENER DIODE UDZS10B TE-17
D2911	407 206 5608	ZENER DIODE UDZS10B TE-17
D2912	407 206 5608	ZENER DIODE UDZS10B TE-17

#### INTEGRATED CIRCUITS

IC2301	409 476 8600	IC NJM319M-TE2
IC2303	409 124 5708	IC L78M09T-TL
IC2304	409 398 1901	IC L88MS05TL-TL
IC2371	409 039 6322	IC NJM2903M-T2
★ IC2501	409 555 0709	IC CXA2180Q
IC2502	409 528 6202	IC PQ050ES1MXP
IC2901	409 490 8006	IC CXA2151Q

#### COILS

L2301	645 040 3101	INDUCTOR, 3.3U M
L2301	645 026 1008	INDUCTOR, 3.3U M
L2340	645 008 2276	INDUCTOR, 22U K
L2341	645 008 2009	INDUCTOR, 10U K
L2501	645 008 2009	INDUCTOR, 10U K
L2517	645 008 2009	INDUCTOR, 10U K
L2520	645 008 2009	INDUCTOR, 10U K
L2901	645 008 2009	INDUCTOR, 10U K
L2902	645 008 2009	INDUCTOR, 10U K
L2910	645 008 2009	INDUCTOR, 10U K

#### TRANSISTORS

Q2320	405 014 4509	TR 2SC2412K-T-96-R
	405 014 4608	TR 2SC2412K-T-96-S
	405 015 8724	TR 2SC2812-L6-TB
	405 015 8922	TR 2SC2812-L7-TB
	405 163 1602	TR 2SC2812N-L6-TB
	405 163 1701	TR 2SC2812N-L7-TB
	405 173 9803	TR 2SC3928A1R
	405 173 9902	TR 2SC3928A1S
★ Q2330	405 014 4509	TR 2SC2412K-T-96-R
	405 014 4608	TR 2SC2412K-T-96-S
	405 015 8724	TR 2SC2812-L6-TB
	405 015 8922	TR 2SC2812-L7-TB

Schematic Location	Part No.	Description
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	405 163 1602	TR 2SC2812N-L6-TB
	405 163 1701	TR 2SC2812N-L7-TB
	405 173 9803	TR 2SC3928A1R
	405 173 9902	TR 2SC3928A1S
Q2331	405 014 4509	TR 2SC2412K-T-96-R
	405 014 4608	TR 2SC2412K-T-96-S
	405 015 8724	TR 2SC2812-L6-TB
	405 015 8922	TR 2SC2812-L7-TB
	405 163 1602	TR 2SC2812N-L6-TB
	405 163 1701	TR 2SC2812N-L7-TB
	405 173 9803	TR 2SC3928A1R
	405 173 9902	TR 2SC3928A1S
Q2333	405 134 5925	TR 2SA1037AK T146 R
	405 147 2205	TR 2SA1037AK T146 S
	405 002 0308	TR 2SA1037K-T-96-R
	405 002 0407	TR 2SA1037K-T-96-S
	405 002 6726	TR 2SA1179-M6
	405 002 6924	TR 2SA1179-M7-TB
	405 163 1503	TR 2SA1179N-M6-TB
	405 163 2708	TR 2SA1179N-M7-TB
	405 173 9605	TR 2SA1235A1E
	405 173 9704	TR 2SA1235A1F
Q2371	405 014 4509	TR 2SC2412K-T-96-R
	405 014 4608	TR 2SC2412K-T-96-S
	405 015 8724	TR 2SC2812-L6-TB
	405 015 8922	TR 2SC2812-L7-TB
	405 163 1602	TR 2SC2812N-L6-TB
	405 163 1701	TR 2SC2812N-L7-TB
	405 173 9803	TR 2SC3928A1R
	405 173 9902	TR 2SC3928A1S
Q2501	405 134 5925	TR 2SA1037AK T146 R
	405 147 2205	TR 2SA1037AK T146 S
	405 002 0308	TR 2SA1037K-T-96-R
	405 002 0407	TR 2SA1037K-T-96-S
	405 002 6726	TR 2SA1179-M6
	405 002 6924	TR 2SA1179-M7-TB
	405 163 1503	TR 2SA1179N-M6-TB
	405 163 2708	TR 2SA1179N-M7-TB
	405 173 9605	TR 2SA1235A1E
	405 173 9704	TR 2SA1235A1F
Q2502	405 134 5925	TR 2SA1037AK T146 R
	405 147 2205	TR 2SA1037AK T146 S
	405 002 0308	TR 2SA1037K-T-96-R
	405 002 0407	TR 2SA1037K-T-96-S
	405 002 6726	TR 2SA1179-M6
	405 002 6924	TR 2SA1179-M7-TB
	405 163 1503	TR 2SA1179N-M6-TB
	405 163 2708	TR 2SA1179N-M7-TB
	405 173 9605	TR 2SA1235A1E
	405 173 9704	TR 2SA1235A1F
Q2503	405 134 5925	TR 2SA1037AK T146 R
	405 147 2205	TR 2SA1037AK T146 S
	405 002 0308	TR 2SA1037K-T-96-R
	405 002 0407	TR 2SA1037K-T-96-S

Schematic Location	Part No.	Description
Q2504	405 002 6726	TR 2SA1179-M6
	405 002 6924	TR 2SA1179-M7-TB
	405 163 1503	TR 2SA1179N-M6-TB
	405 163 2708	TR 2SA1179N-M7-TB
	405 173 9605	TR 2SA1235A1E
	405 173 9704	TR 2SA1235A1F
	405 134 5925	TR 2SA1037AK T146 R
	405 147 2205	TR 2SA1037AK T146 S
	405 002 0308	TR 2SA1037K-T-96-R
	405 002 0407	TR 2SA1037K-T-96-S
Q2505	405 002 6726	TR 2SA1179-M6
	405 002 6924	TR 2SA1179-M7-TB
	405 163 1503	TR 2SA1179N-M6-TB
	405 163 2708	TR 2SA1179N-M7-TB
	405 173 9605	TR 2SA1235A1E
	405 173 9704	TR 2SA1235A1F
	405 134 5925	TR 2SA1037AK T146 R
	405 147 2205	TR 2SA1037AK T146 S
	405 002 0308	TR 2SA1037K-T-96-R
	405 002 0407	TR 2SA1037K-T-96-S
Q2506	405 002 6726	TR 2SA1179-M6
	405 002 6924	TR 2SA1179-M7-TB
	405 163 1503	TR 2SA1179N-M6-TB
	405 163 2708	TR 2SA1179N-M7-TB
	405 173 9605	TR 2SA1235A1E
	405 173 9704	TR 2SA1235A1F
	405 014 4509	TR 2SC2412K-T-96-R
	405 014 4608	TR 2SC2412K-T-96-S
	405 015 8724	TR 2SC2812-L6-TB
	405 015 8922	TR 2SC2812-L7-TB
Q2513	405 163 1602	TR 2SC2812N-L6-TB
	405 163 1701	TR 2SC2812N-L7-TB
	405 173 9803	TR 2SC3928A1R
	405 173 9902	TR 2SC3928A1S
	405 134 5925	TR 2SA1037AK T146 R
	405 147 2205	TR 2SA1037AK T146 S
	405 002 0308	TR 2SA1037K-T-96-R
	405 002 0407	TR 2SA1037K-T-96-S
	405 002 6726	TR 2SA1179-M6
	405 002 6924	TR 2SA1179-M7-TB
Q2910	405 163 1503	TR 2SA1179N-M6-TB
	405 163 2708	TR 2SA1179N-M7-TB
	405 173 9605	TR 2SA1235A1E
	405 173 9704	TR 2SA1235A1F
	405 134 5925	TR 2SA1037AK T146 R
	405 147 2205	TR 2SA1037AK T146 S
	405 002 0308	TR 2SA1037K-T-96-R
	405 002 0407	TR 2SA1037K-T-96-S
	405 002 6726	TR 2SA1179-M6
	405 002 6924	TR 2SA1179-M7-TB
	405 163 1503	TR 2SA1179N-M6-TB
	405 163 2708	TR 2SA1179N-M7-TB
	405 173 9605	TR 2SA1235A1E
	405 173 9704	TR 2SA1235A1F

Schematic Location	Part No.	Description
<b>RESISTORS</b>		
R2301	401 255 6500	MT-GLAZE 100 JA 1/10W
R2302	401 256 0101	MT-GLAZE 8.2K JA 1/10W
R2303	401 150 6209	MT-GLAZE 1K JA 1/10W
R2304	401 150 6209	MT-GLAZE 1K JA 1/10W
R2305	401 256 0101	MT-GLAZE 8.2K JA 1/10W
R2306	401 256 0101	MT-GLAZE 8.2K JA 1/10W
R2309	401 291 7608	MT-GLAZE 10 FA 1/2W
R2310	401 255 6500	MT-GLAZE 100 JA 1/10W
R2311	401 255 6500	MT-GLAZE 100 JA 1/10W
R2312	401 255 6500	MT-GLAZE 100 JA 1/10W
R2313	401 255 6500	MT-GLAZE 100 JA 1/10W
R2314	401 255 6500	MT-GLAZE 100 JA 1/10W
R2315	401 255 6500	MT-GLAZE 100 JA 1/10W
R2317	401 264 1909	MT-GLAZE 10K FA 1/10W
R2318	401 256 6004	MT-GLAZE 27K JA 1/10W
R2319	401 256 0101	MT-GLAZE 8.2K JA 1/10W
R2320	401 162 3609	MT-GLAZE 470 JA 1/10W
R2321	401 255 6500	MT-GLAZE 100 JA 1/10W
R2322	401 150 6001	MT-GLAZE 0.000 ZA 1/10W
R2323	401 255 6500	MT-GLAZE 100 JA 1/10W
R2324	401 255 9501	MT-GLAZE 220K JA 1/10W
R2325	401 150 5905	MT-GLAZE 10K JA 1/10W
R2326	401 256 6608	MT-GLAZE 68K JA 1/10W
R2327	401 150 5806	MT-GLAZE 100K JA 1/10W
R2328	401 162 3708	MT-GLAZE 4.7K JA 1/10W
R2329	401 256 1702	MT-GLAZE 33K JA 1/10W
R2330	401 256 5908	MT-GLAZE 2.7K JA 1/10W
R2331	401 256 6608	MT-GLAZE 68K JA 1/10W
R2332	401 256 5304	MT-GLAZE 56K JA 1/10W
R2333	401 256 5908	MT-GLAZE 2.7K JA 1/10W
R2334	401 162 4101	MT-GLAZE 5.6K JA 1/10W
R2335	401 256 3607	MT-GLAZE 15K JA 1/10W
R2336	401 162 4101	MT-GLAZE 5.6K JA 1/10W
R2337	401 162 3708	MT-GLAZE 4.7K JA 1/10W
R2338	401 255 6500	MT-GLAZE 100 JA 1/10W
R2341	401 150 6001	MT-GLAZE 0.000 ZA 1/10W
R2343	401 150 6001	MT-GLAZE 0.000 ZA 1/10W
R2344	401 150 6001	MT-GLAZE 0.000 ZA 1/10W
R2345	401 150 6001	MT-GLAZE 0.000 ZA 1/10W
R2346	401 150 6001	MT-GLAZE 0.000 ZA 1/10W
R2347	401 255 6500	MT-GLAZE 100 JA 1/10W
R2348	401 255 6500	MT-GLAZE 100 JA 1/10W
R2349	401 256 5908	MT-GLAZE 2.7K JA 1/10W
R2350	401 255 6500	MT-GLAZE 100 JA 1/10W
R2352	401 255 6500	MT-GLAZE 100 JA 1/10W
R2353	401 256 6905	MT-GLAZE 680 JA 1/10W
R2354	401 162 3104	MT-GLAZE 3.3K JA 1/10W
R2355	401 256 7704	MT-GLAZE 3.9M JA 1/10W
R2356	401 256 7803	MT-GLAZE 390K JA 1/10W
R2357	401 255 6500	MT-GLAZE 100 JA 1/10W
R2358	401 255 6500	MT-GLAZE 100 JA 1/10W
R2360	401 162 3708	MT-GLAZE 4.7K JA 1/10W
R2361	401 150 6100	MT-GLAZE 2.2K JA 1/10W

Schematic Location	Part No.	Description
R2362	401 150 6100	MT-GLAZE 2.2K JA 1/10W
R2363	401 255 5800	MT-GLAZE 2K JA 1/10W
R2364	401 255 5800	MT-GLAZE 2K JA 1/10W
R2365	401 162 2909	MT-GLAZE 220 JA 1/10W
R2367	401 256 5304	MT-GLAZE 56K JA 1/10W
R2368	401 150 6100	MT-GLAZE 2.2K JA 1/10W
R2369	401 150 6100	MT-GLAZE 2.2K JA 1/10W
R2371	401 150 5905	MT-GLAZE 10K JA 1/10W
R2372	401 256 7605	MT-GLAZE 3.9K JA 1/10W
R2373	401 150 5905	MT-GLAZE 10K JA 1/10W
R2374	401 256 7308	MT-GLAZE 6.8K JA 1/10W
R2375	401 256 1702	MT-GLAZE 33K JA 1/10W
R2376	401 150 5905	MT-GLAZE 10K JA 1/10W
R2377	401 256 7605	MT-GLAZE 3.9K JA 1/10W
R2378	401 150 5905	MT-GLAZE 10K JA 1/10W
R2379	401 162 3104	MT-GLAZE 3.3K JA 1/10W
★ R2380	401 150 5905	MT-GLAZE 10K JA 1/10W
★ R2382	401 150 6001	MT-GLAZE 0.000 ZA 1/10W
R2503	401 152 3206	MT-GLAZE 330 JA 1/10W
R2506	401 306 3809	MT-GLAZE 470FA 1/4W
R2507	401 152 3206	MT-GLAZE 330 JA 1/10W
R2508	401 152 3206	MT-GLAZE 330 JA 1/10W
R2510	401 306 3809	MT-GLAZE 470FA 1/4W
R2511	401 306 3809	MT-GLAZE 470FA 1/4W
R2512	401 150 6209	MT-GLAZE 1K JA 1/10W
R2513	401 255 6500	MT-GLAZE 100 JA 1/10W
R2514	401 256 1702	MT-GLAZE 33K JA 1/10W
R2516	401 150 6209	MT-GLAZE 1K JA 1/10W
R2517	401 150 6001	MT-GLAZE 0.000 ZA 1/10W
R2520	401 255 6500	MT-GLAZE 100 JA 1/10W
R2522	401 256 1900	MT-GLAZE 3.3M JA 1/10W
R2523	401 255 6500	MT-GLAZE 100 JA 1/10W
R2525	401 255 6500	MT-GLAZE 100 JA 1/10W
R2527	401 265 1700	MT-GLAZE 4.7K FA 1/10W
R2538	401 150 6001	MT-GLAZE 0.000 ZA 1/10W
R2543	401 150 6209	MT-GLAZE 1K JA 1/10W
R2544	401 150 6209	MT-GLAZE 1K JA 1/10W
R2545	401 150 6209	MT-GLAZE 1K JA 1/10W
R2546	401 162 2909	MT-GLAZE 220 JA 1/10W
R2547	401 150 6209	MT-GLAZE 1K JA 1/10W
R2548	401 256 4109	MT-GLAZE 56 JA 1/10W
R2560	401 256 4109	MT-GLAZE 56 JA 1/10W
R2561	401 256 4109	MT-GLAZE 56 JA 1/10W
R2562	401 256 4109	MT-GLAZE 56 JA 1/10W
R2616	401 150 6001	MT-GLAZE 0.000 ZA 1/10W
R2617	401 150 6001	MT-GLAZE 0.000 ZA 1/10W
R2624	401 255 6500	MT-GLAZE 100 JA 1/10W
R2626	401 255 6500	MT-GLAZE 100 JA 1/10W
R2945	401 256 5601	MT-GLAZE 47 JA 1/10W
R2946	401 256 5601	MT-GLAZE 47 JA 1/10W
R2947	401 256 5601	MT-GLAZE 47 JA 1/10W
R2950	401 255 6500	MT-GLAZE 100 JA 1/10W
R2951	401 255 6500	MT-GLAZE 100 JA 1/10W
R2953	401 150 6001	MT-GLAZE 0.000 ZA 1/10W

Schematic Location	Part No.	Description
R2962	401 255 6500	MT-GLAZE 100 JA 1/10W
R2963	401 255 6500	MT-GLAZE 100 JA 1/10W
R2964	401 255 6500	MT-GLAZE 100 JA 1/10W
R2968	401 162 2909	MT-GLAZE 220 JA 1/10W
R2969	401 162 2909	MT-GLAZE 220 JA 1/10W
R2970	401 162 2909	MT-GLAZE 220 JA 1/10W
R2971	401 162 2909	MT-GLAZE 220 JA 1/10W
R2982	401 150 6209	MT-GLAZE 1K JA 1/10W
R2983	401 264 1909	MT-GLAZE 10K FA 1/10W
R2985	401 150 5806	MT-GLAZE 100K JA 1/10W
R2986	401 150 5806	MT-GLAZE 100K JA 1/10W

#### MISCELLANEOUS

A4351	610 303 1064	ASSY, PWB, VIDEO-G7FAM
JS2648	401 150 6001	MT-GLAZE 0.000 ZA 1/10W
JS2649	401 150 6001	MT-GLAZE 0.000 ZA 1/10W
JS2650	401 150 6001	MT-GLAZE 0.000 ZA 1/10W
X2301	645 047 2794	OSC, CERAMIC 2.696MHZ
X2901	645 041 3841	OSC, CRYSTAL 4MHZ

Schematic Location	Part No.	Description
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## VELOCITY MODULATION PC BOARD

### CAPACITORS

C1705	404 092 1905	ELECT	100U M	50V
C1711	403 057 3107	POLYESTER	0.1U K	50V
	403 181 8207	POLYESTER	0.1U K	50V
C1712	403 062 0504	POLYESTER	0.047U K	50V
	403 179 0909	POLYESTER	0.047U K	50V
C1713	403 071 5606	CERAMIC	220P K	50V
C1715	403 159 7409	MT-POLYEST	0.1U K	250V
C1717	404 084 5508	MT-POLYEST	0.1UJ	63V
C1718	404 084 2507	ELECT	47U M	10V
C1719	403 259 9006	ELECT	10U M	160V
C1721	404 084 3801	ELECT	1U M	50V
C1722	403 222 0603	ELECT	22U M	160V
C1723	403 075 8009	CERAMIC	0.01U K	500V
C1724	403 071 5606	CERAMIC	220P K	50V
C1748	403 069 8305	CERAMIC	0.01U Z	50V
C1749	404 084 4303	ELECT	47U M	50V
C1750	403 069 8305	CERAMIC	0.01U Z	50V
C1751	404 084 3900	ELECT	10U M	50V

### COILS

★ L1708	402 001 6300	FUSIBLE RES 10 J- 1/4W
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### DIODES

D1705	407 108 5300	DIODE SB07-03N
D1707	407 108 5300	DIODE SB07-03N
D1708	407 012 4406	DIODE 1SS133
D1750	407 012 4406	DIODE 1SS133
D1751	407 012 4406	DIODE 1SS133
D1752	407 012 4406	DIODE 1SS133

### TRANSISTORS

Q1702	405 011 8401	TR 2SC1740S-Q
	405 011 8500	TR 2SC1740S-R
	405 011 8609	TR 2SC1740S-S
	405 012 2002	TR 2SC1815-GR
	405 012 2101	TR 2SC1815-O
	405 012 2309	TR 2SC1815-Y
	405 157 0505	TR 2SC536NF-NPA
	405 151 8705	TR 2SC536NG-NPA
	405 020 7501	TR 2SC945A-PA
	405 020 7709	TR 2SC945A-QA
	405 020 7907	TR 2SC945A-RA
Q1706	405 086 8702	TR 2SC4159
	405 086 8801	TR 2SC4159
Q1707	405 086 8702	TR 2SC4159
	405 086 8801	TR 2SC4159
Q1708	405 100 1603	TR 2SA1606-D-RA
	405 100 1702	TR 2SA1606-E-RA

Schematic Location	Part No.	Description
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Q1709	405 108 4903	TR 2SA1837-LB
Q1711	405 108 5009	TR 2SC4793-LB
Q1712	405 011 8401	TR 2SC1740S-Q
	405 011 8500	TR 2SC1740S-R
	405 011 8609	TR 2SC1740S-S
	405 012 2002	TR 2SC1815-GR
	405 012 2101	TR 2SC1815-O
	405 012 2309	TR 2SC1815-Y
	405 157 0505	TR 2SC536NF-NPA
	405 151 8705	TR 2SC536NG-NPA
	405 020 7501	TR 2SC945A-PA
	405 020 7709	TR 2SC945A-QA
	405 020 7907	TR 2SC945A-RA

### RESISTORS

R1701	401 024 6700	CARBON	100 JA	1/6W
R1707	401 027 5205	CARBON	680 JA	1/6W
R1708	401 015 7808	CARBON	2.7 JA	1/4W
R1709	401 015 7808	CARBON	2.7 JA	1/4W
R1711	401 027 2105	CARBON	56 JA	1/6W
R1716	401 026 3905	CARBON	330 JA	1/6W
R1720	401 024 9701	CARBON	12K JA	1/6W
R1722	401 026 4605	CARBON	33K JA	1/6W
R1723	401 027 2600	CARBON	5.6K JA	1/6W
R1724	401 027 5908	CARBON	68K JA	1/6W
R1727	401 006 9408	CARBON	10 JB	1/2W
R1728	401 025 3807	CARBON	180 JA	1/6W
★ R1730	401 067 5302	OXIDE-MT	330 JA	2W
R1732	401 024 9305	CARBON	1.2K JA	1/6W
R1733	401 024 7707	CARBON	100K JA	1/6W
R1734	401 024 7707	CARBON	100K JA	1/6W
R1735	401 024 9305	CARBON	1.2K JA	1/6W
R1736	401 024 9701	CARBON	12K JA	1/6W
★ R1737	401 065 1801	OXIDE-MT	12 JA	2W
★ R1738	401 065 1801	OXIDE-MT	12 JA	2W
★ R1742	401 066 6102	OXIDE-MT	220 JA	2W
★ R1743	402 063 6706	FUSIBLE RES	270 J-	2W
R1744	401 024 9305	CARBON	1.2K JA	1/6W

### MISCELLANEOUS

A700	610 302 9900	ASSY, PWB, CRT VM-G7FAM X2
A1701	610 303 0197	ASSY, PWB, VM-G7FAM



Schematic Location	Part No.	Description
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## CRT SOCKET PC BOARD

### CAPACITORS

C711	403 161 9200	MT-POLYEST	0.22U K	250V
C721	403 161 9200	MT-POLYEST	0.22U K	250V
C731	403 161 9200	MT-POLYEST	0.22U K	250V
C733	403 057 3107	POLYESTER	0.1U K	50V
	0	POLYESTER	0.1U K	50V
★ C742	403 245 5609	ELECT	10U M	250V
★ C744	403 077 2807	CERAMIC	1000P Z	2K
C754	404 087 0500	ELECT	220U M	10V

### DIODES

D711	407 006 3903	DIODE ERB43-04
	407 011 4407	DIODE TVR1G
D712	407 006 3903	DIODE ERB43-04
	407 011 4407	DIODE TVR1G
D721	407 006 3903	DIODE ERB43-04
	407 011 4407	DIODE TVR1G
D722	407 006 3903	DIODE ERB43-04
	407 011 4407	DIODE TVR1G
D731	407 006 3903	DIODE ERB43-04
	407 011 4407	DIODE TVR1G
D732	407 006 3903	DIODE ERB43-04
	407 011 4407	DIODE TVR1G
D742	407 124 6404	DIODE ERA18-04
	407 007 6606	DIODE ES1
	407 124 5506	DIODE RMPG06G
D752	408 008 2406	DIODE 1N4148
	407 013 4306	DIODE 1S2076A
	407 013 7109	DIODE 1S2473
D753	408 008 2406	DIODE 1N4148
	407 013 4306	DIODE 1S2076A
	407 013 7109	DIODE 1S2473
D754	408 008 2406	DIODE 1N4148
	407 013 4306	DIODE 1S2076A
	407 013 7109	DIODE 1S2473
D755	407 065 1308	ZENER DIODE MTZJ3.6B
D761	407 099 6607	ZENER DIODE MTZJ12B
	407 054 3207	ZENER DIODE RD12EB2
D762	407 099 6607	ZENER DIODE MTZJ12B
	407 054 3207	ZENER DIODE RD12EB2
D763	407 099 6607	ZENER DIODE MTZJ12B
	407 054 3207	ZENER DIODE RD12EB2

Schematic Location	Part No.	Description
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## INTEGRATED CIRCUITS

IC711	409 542 4406	IC TDA6118JF/N1
IC721	409 542 4406	IC TDA6118JF/N1
IC731	409 542 4406	IC TDA6118JF/N1

### COILS

L710	401 025 7102	CARBON 22 JA 1/6W
L710TM	403 069 8305	CERAMIC 0.01U Z 50V
L711	645 008 0777	INDUCTOR, 12U K
L721	645 008 0777	INDUCTOR, 12U K
L731	645 008 0777	INDUCTOR, 12U K
L741	645 001 4871	INDUCTOR, 10U K

### TRANSISTORS

Q711	405 011 8401	TR 2SC1740S-Q
	405 011 8500	TR 2SC1740S-R
	405 011 8609	TR 2SC1740S-S
	405 012 2002	TR 2SC1815-GR
	405 012 2101	TR 2SC1815-O
	405 012 2309	TR 2SC1815-Y
	405 157 0505	TR 2SC536NF-NPA
	405 151 8705	TR 2SC536NG-NPA
	405 020 7501	TR 2SC945A-PA
	405 020 7709	TR 2SC945A-QA
	405 020 7907	TR 2SC945A-RA
Q721	405 011 8401	TR 2SC1740S-Q
	405 011 8500	TR 2SC1740S-R
	405 011 8609	TR 2SC1740S-S
	405 012 2002	TR 2SC1815-GR
	405 012 2101	TR 2SC1815-O
	405 012 2309	TR 2SC1815-Y
	405 157 0505	TR 2SC536NF-NPA
	405 151 8705	TR 2SC536NG-NPA
	405 020 7501	TR 2SC945A-PA
	405 020 7709	TR 2SC945A-QA
	405 020 7907	TR 2SC945A-RA
Q731	405 011 8401	TR 2SC1740S-Q
	405 011 8500	TR 2SC1740S-R
	405 011 8609	TR 2SC1740S-S
	405 012 2002	TR 2SC1815-GR
	405 012 2101	TR 2SC1815-O
	405 012 2309	TR 2SC1815-Y
	405 157 0505	TR 2SC536NF-NPA
	405 151 8705	TR 2SC536NG-NPA
	405 020 7501	TR 2SC945A-PA
	405 020 7709	TR 2SC945A-QA
	405 020 7907	TR 2SC945A-RA



Schematic Location	Part No.	Description
Q741	405 011 8401	TR 2SC1740S-Q
	405 011 8500	TR 2SC1740S-R
	405 011 8609	TR 2SC1740S-S
	405 012 2002	TR 2SC1815-GR
	405 012 2101	TR 2SC1815-O
	405 012 2309	TR 2SC1815-Y
	405 157 0505	TR 2SC536NF-NPA
	405 151 8705	TR 2SC536NG-NPA
	405 020 7501	TR 2SC945A-PA
	405 020 7709	TR 2SC945A-QA
	405 020 7907	TR 2SC945A-RA
Q742	405 029 7106	TR 2SC2271-D
	405 013 6207	TR 2SC2271-D-CTV
	405 029 7205	TR 2SC2271-E
	405 013 6306	TR 2SC2271-E-CTV
Q743	405 101 5600	TR 2SA1786E-AN
Q753	406 000 6804	TR 2SA1015-GR(SAN)
	405 001 7407	TR 2SA1015-O(SAN)
	405 001 7605	TR 2SA1015-Y(SAN)
	405 004 3109	TR 2SA564A-Q(CU)
	405 004 3208	TR 2SA564A-R(CU)
	405 151 3304	TR 2SA608NF-NPA
	405 006 1707	TR 2SA933S-Q
	405 006 1806	TR 2SA933S-R

#### RESISTORS

R701	401 012 4503	CARBON	100 JA	1/4W
R702	401 012 4503	CARBON	100 JA	1/4W
R703	401 012 4503	CARBON	100 JA	1/4W
R711	401 024 6700	CARBON	100 JA	1/6W
R712	401 020 0801	CARBON	470 JA	1/4W
R713	401 027 2105	CARBON	56 JA	1/6W
R714	401 027 2105	CARBON	56 JA	1/6W
R716	401 012 4503	CARBON	100 JA	1/4W
R717	401 008 6702	CARBON	220 JA	1/2W
R719	401 025 4903	CARBON	180K JA	1/6W
R721	401 024 6700	CARBON	100 JA	1/6W
R722	401 020 0801	CARBON	470 JA	1/4W
R723	401 027 2105	CARBON	56 JA	1/6W
R724	401 027 2105	CARBON	56 JA	1/6W
R725	401 012 4503	CARBON	100 JA	1/4W
R726	401 008 6702	CARBON	220 JA	1/2W
R727	401 012 5708	CARBON	1K JA	1/4W
R729	401 025 4606	CARBON	18K JA	1/6W
R731	401 024 6700	CARBON	100 JA	1/6W
R732	401 020 0801	CARBON	470 JA	1/4W
R733	401 027 2105	CARBON	56 JA	1/6W
R734	401 027 2105	CARBON	56 JA	1/6W
R735	401 012 4503	CARBON	100 JA	1/4W
R736	401 008 6702	CARBON	220 JA	1/2W
R737	401 012 5708	CARBON	1K JA	1/4W
R739	401 012 5708	CARBON	1K JA	1/4W
★ R741	401 064 5701	OXIDE-MT	1.8 JA	2W

Schematic Location	Part No.	Description
R742	401 024 7707	CARBON 100K JA 1/6W
R743	401 025 1902	CARBON 15K JA 1/6W
R744	401 024 7707	CARBON 100K JA 1/6W
★ R745	401 068 5509	OXIDE-MT 47K JA 2W
★ R746	401 067 4206	OXIDE-MT 33 JA 2W
R747	401 027 2600	CARBON 5.6K JA 1/6W
R756	401 024 7004	CARBON 1K JA 1/6W
R757	401 026 6609	CARBON 390 JA 1/6W
R758	401 024 7400	CARBON 10K JA 1/6W
R759	401 024 6403	CARBON 10 JA 1/6W

#### MISCELLANEOUS

A701	610 303 0180	ASSY, PWB, SOCKET-G7FAM
★ K702	645 025 6103	SOCKET, CRT 8P
	645 028 0306	SOCKET, CRT 8P
XL710	610 216 4268	FILTER, EMI 120PF
XL720	610 216 4268	FILTER, EMI 120PF
XL730	610 216 4268	FILTER, EMI 120PF

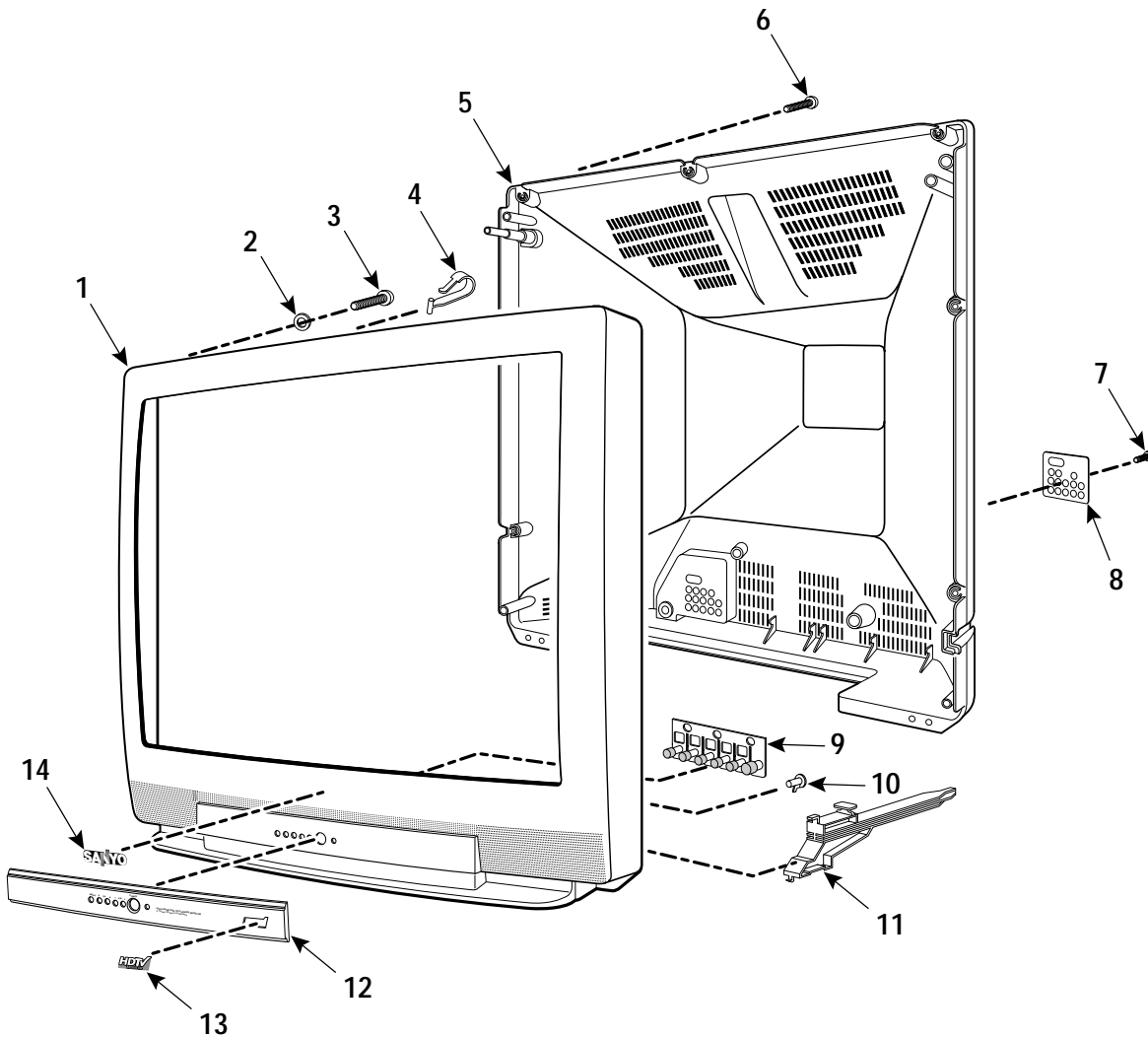
#### I/P CONVERTER PC BOARD

A7200	610 302 9924	ASSY, PWB, I/P-G7FAM
Nonservicable part. No discreet parts provided for this pc board.		

#### MISCELLANEOUS PARTS

★ L901	645 039 2559	COIL, DEGAUSSING
	645 041 1830	COIL, DEGAUSSING
	645 051 9215	COIL, DEGAUSSING
★ Q900	414 012 0802	CRT A80AEJ15X12
	SP901	SPEAKER, 8
★ W900	SP902	SPEAKER, 8
	610 264 8362	ASSY, WIRE GND CONNECTOR
NA	610 267 0325	(MEX) GND CONNECTOR
	610 304 8338	VM BOARD HOLDER IP

# CABINET PARTS LIST



## CABINET PARTS LIST

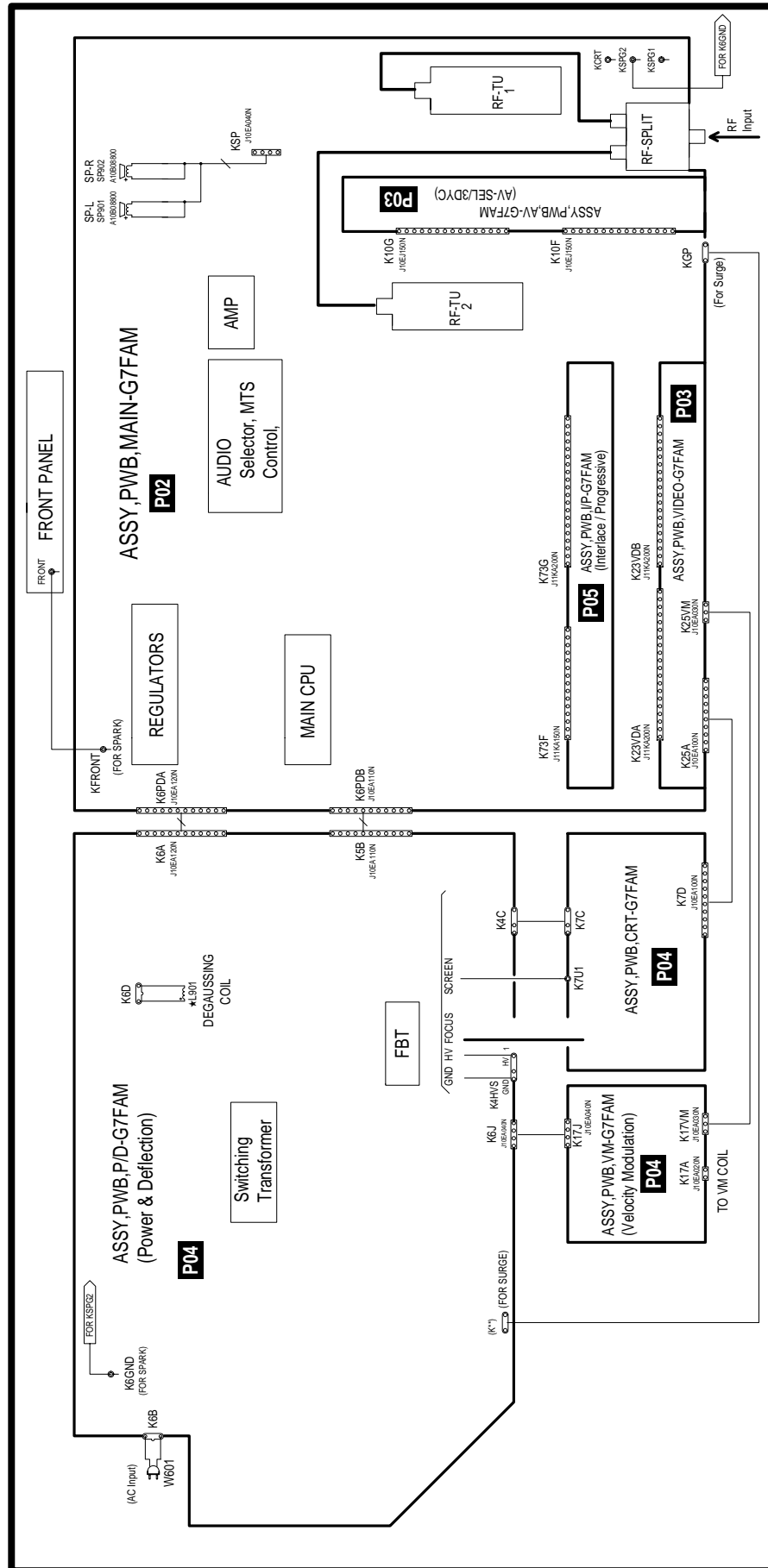
KEY NO.	PARTS NO.	DESCRIPTION
1	610 304 8307	CABINET FRONT-G7FAM
2	610 268 9648	CRT MTG WASHER (BOT )
	610 268 9662	CRT MTG WASHER (TOP)
3	412 053 3905	CRT MTG SCREW (4 USED)
4	610 102 7151	DC HOLDER HBZ
5	610 304 8314	CABINET BACK-G7FAM
6	412 064 4304	SCREW 4X14 (11 USED)
7	411 026 2303	SCREW 3X10 (3 USED)
8	610 300 9438	DEC AV SHEET-G7FAM
9	610 304 8253	ASSY, BUTTON UNIT-G7FAM
10	610 289 5148	CAP RC-G8EAM
11	610 304 8321	CHASSIS RAIL-G7FAM
12	610 304 8345	PANEL FRONT-G7FAM
13	610 291 3484	BADGE HDTV
14	610 293 2560	SANYO BADGE-LARGE (SILVER)

## ACCESSORY PARTS LIST

KEY NO.	PARTS NO.	DESCRIPTION
	610 304 6884	OWNER'S MANUAL-G7FAM
	645 052 5018	ASSY, REMOCON FXWC
	610 298 2398	RC-BATTERY LID-FXWA

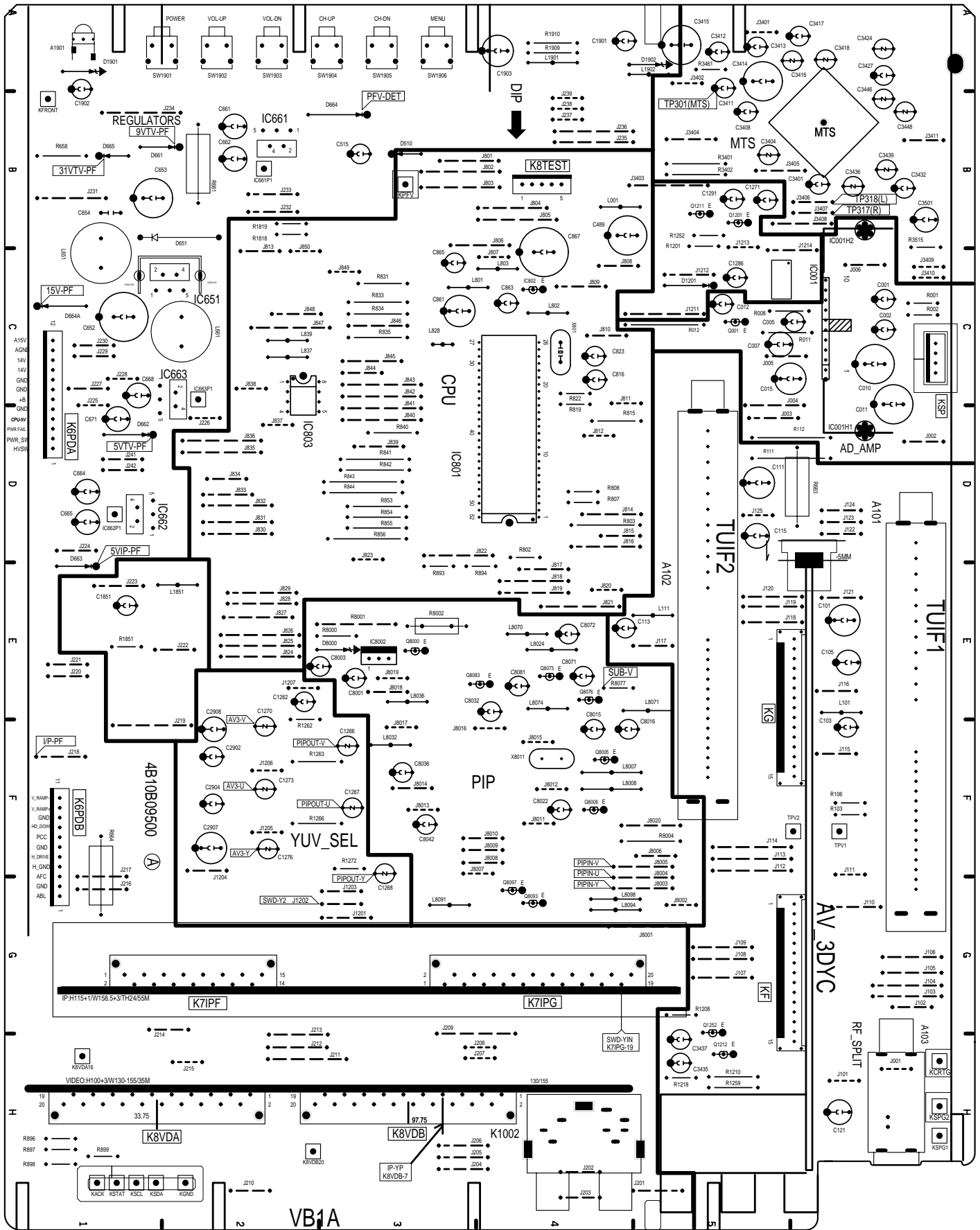
# BOARD CONNECTION AND LOCATION

P01



# COMPONENT AND TESTPOINT LOCATIONS

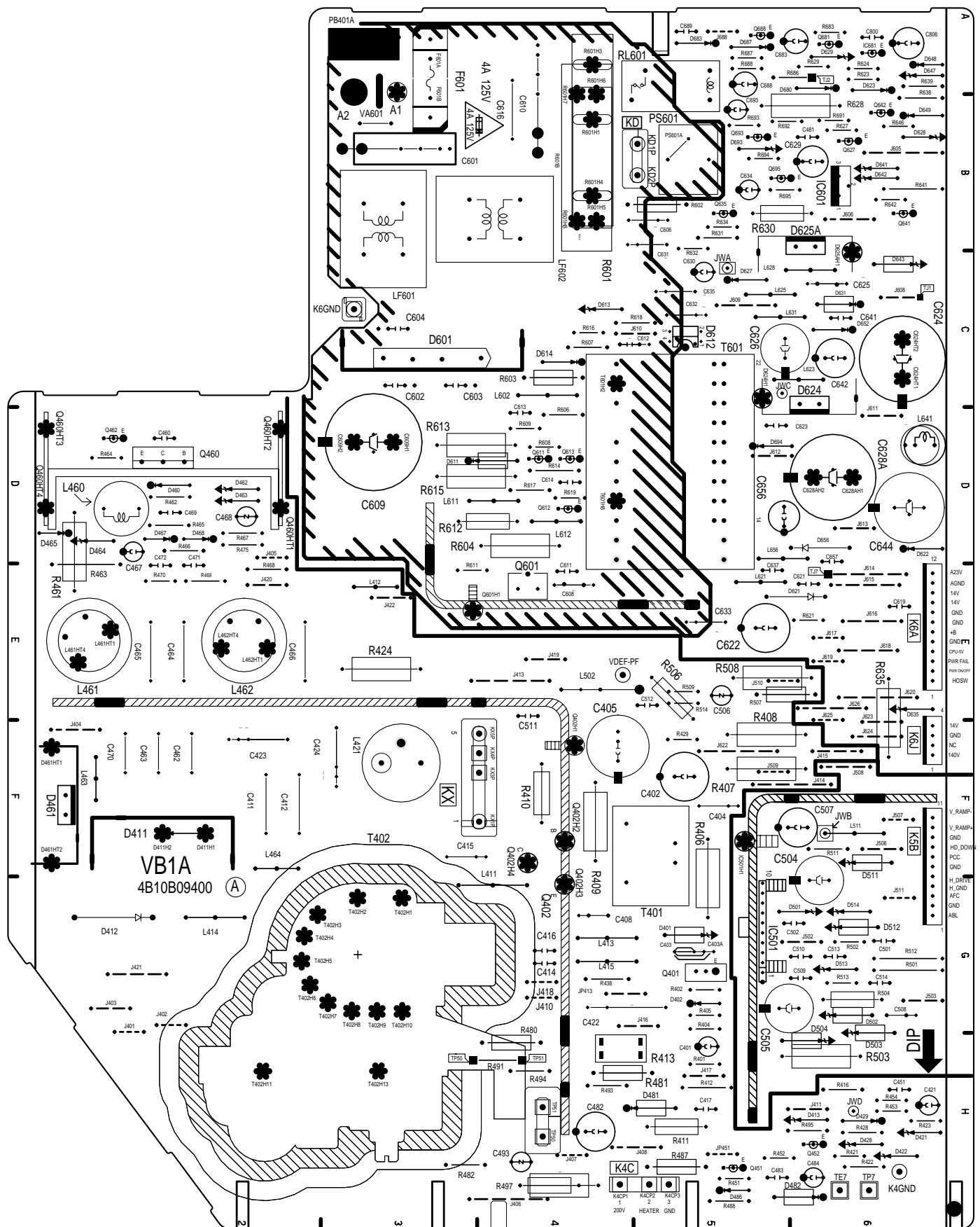
## MAIN BOARD PARTS SIDE



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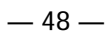
# COMPONENT AND TESTPOINT LOCATIONS (Cont.)

## POWER / DEFLECTION BOARD PARTS SIDE





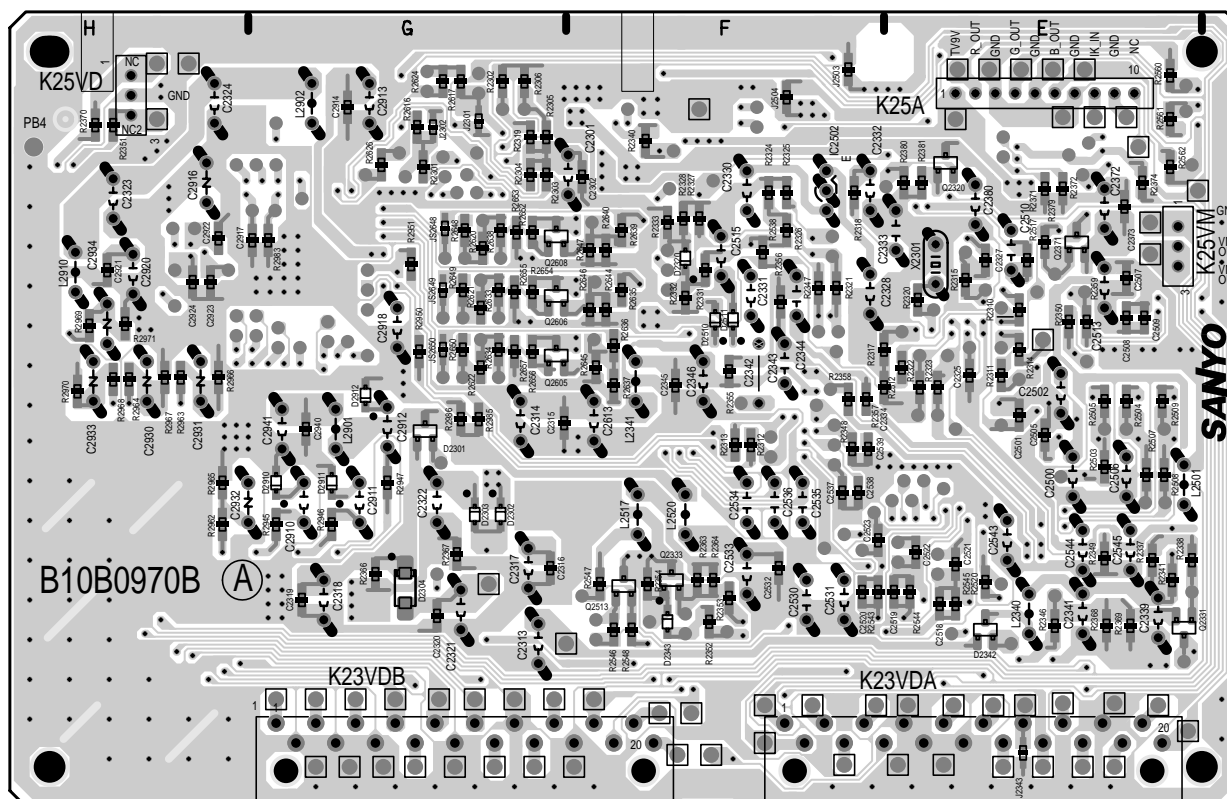
### I/P CONVERTER PARTS SIDE



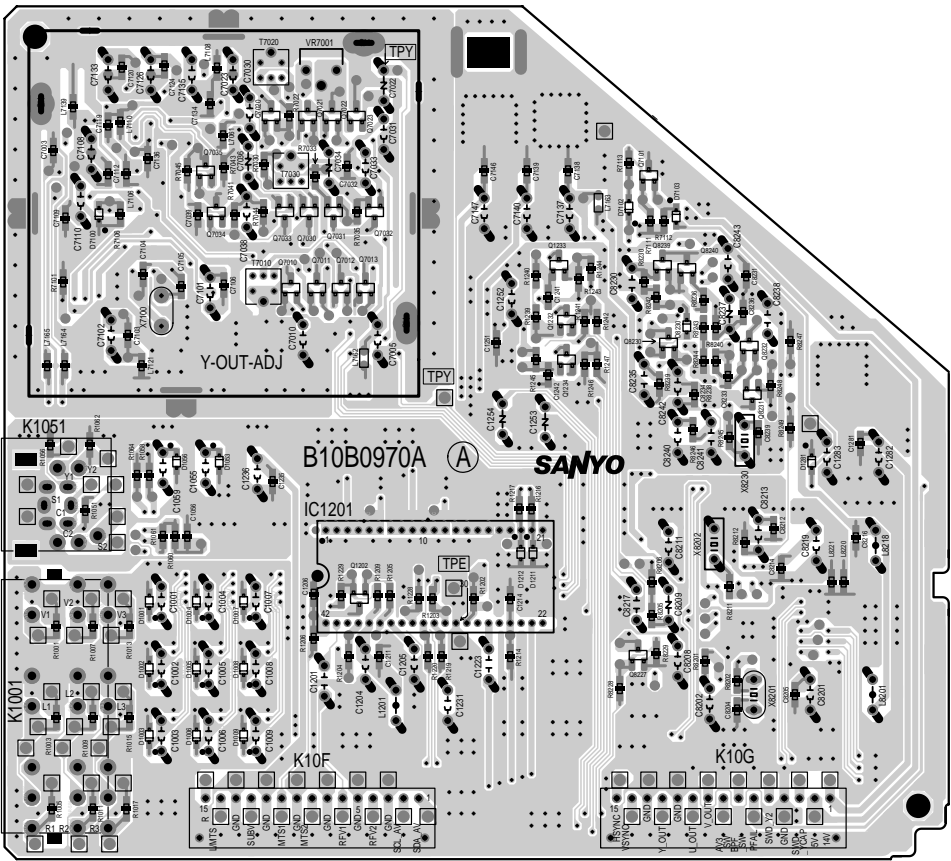
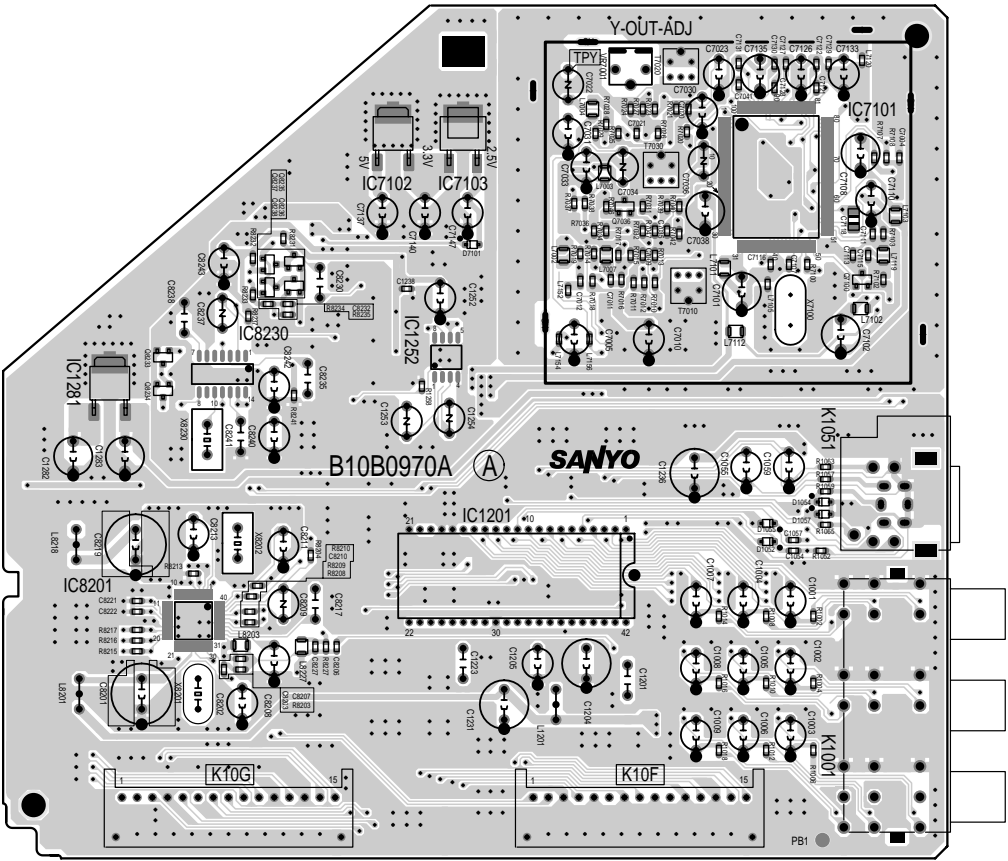




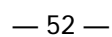
## VIDEO BOARD



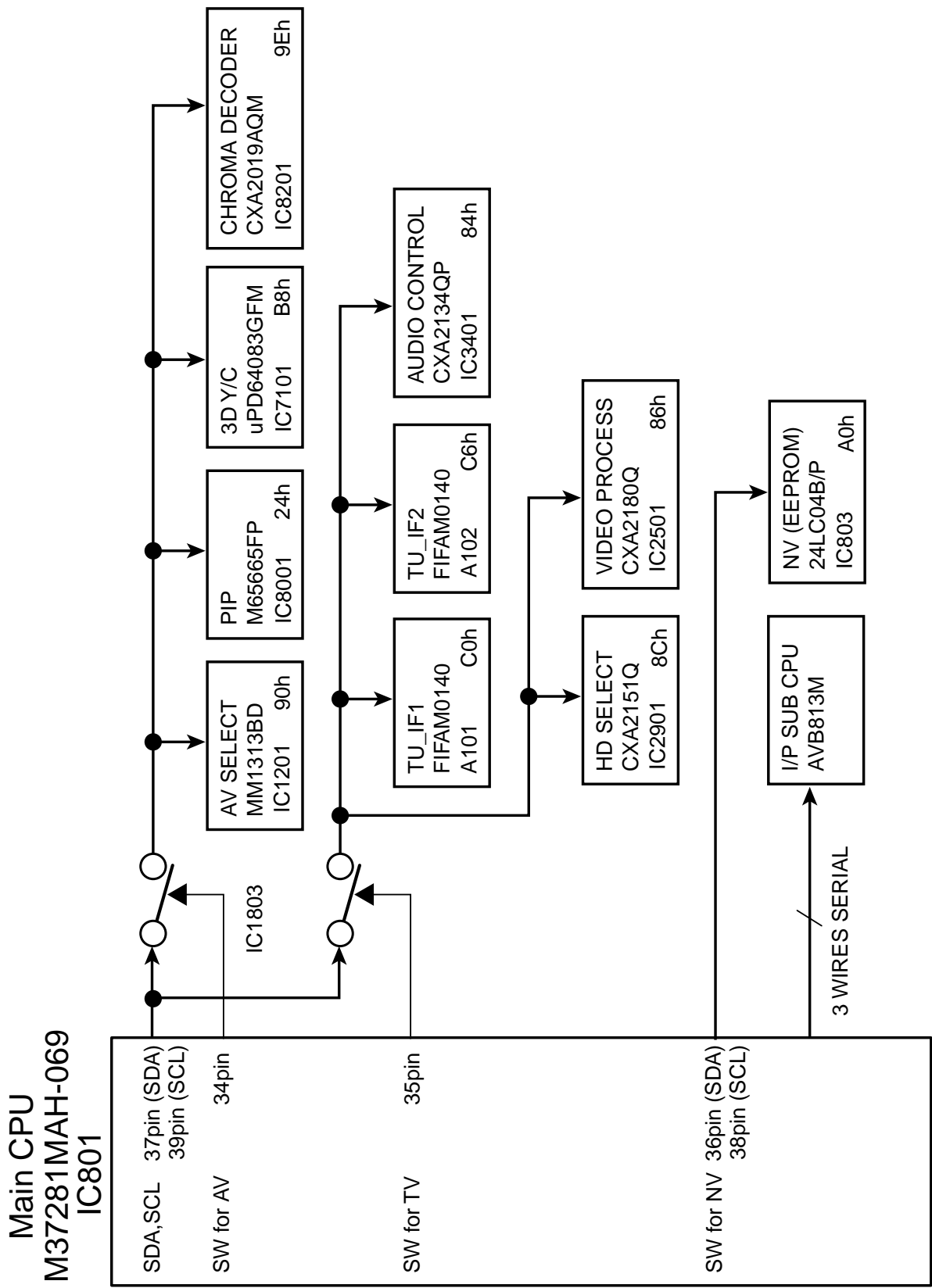
AV BOARD



## CRT SOCKET BOARD PARTS SIDE

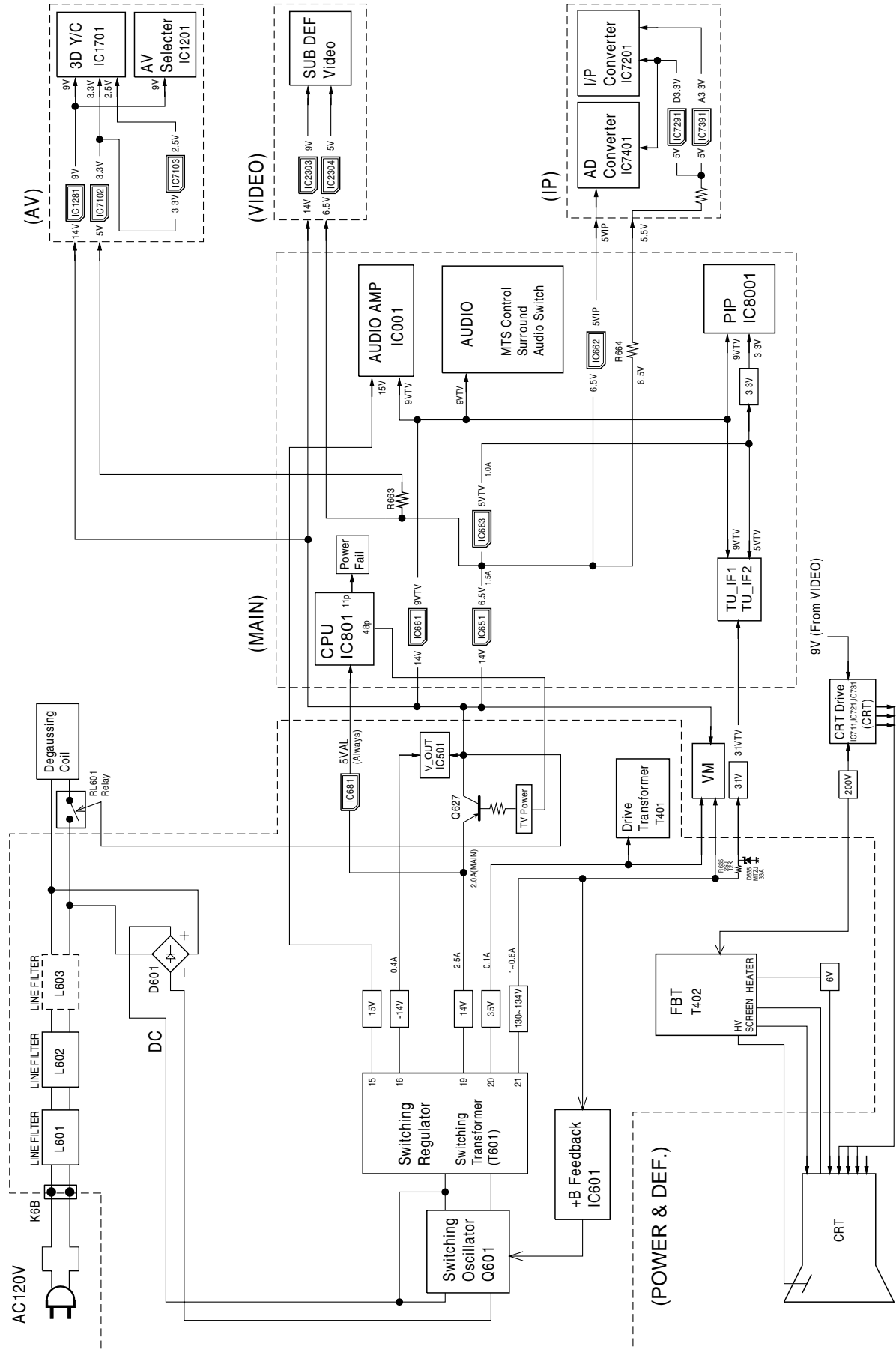


MAIN CPU DATA BUS LINES



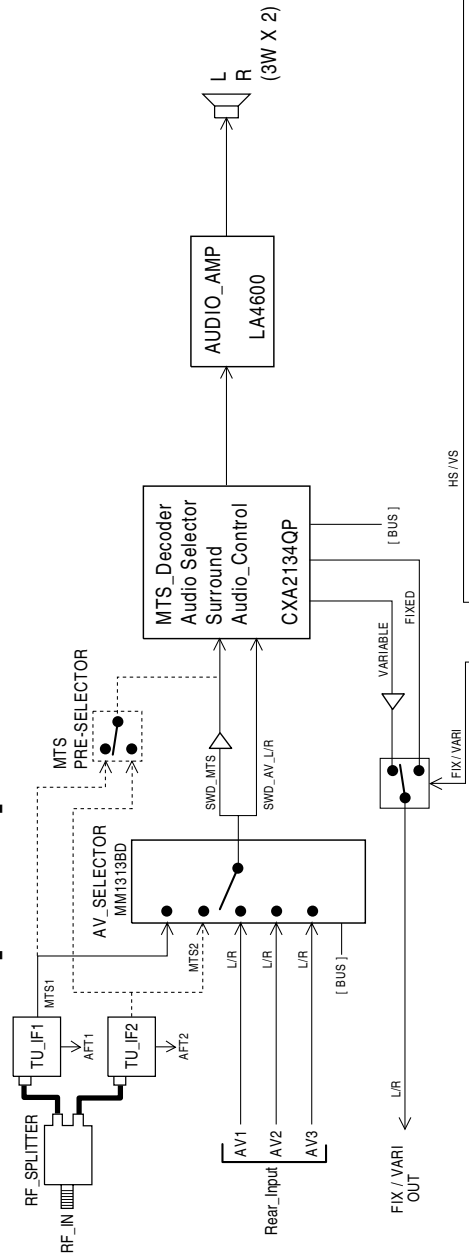
# POWER LINES

( ) : Unit Name

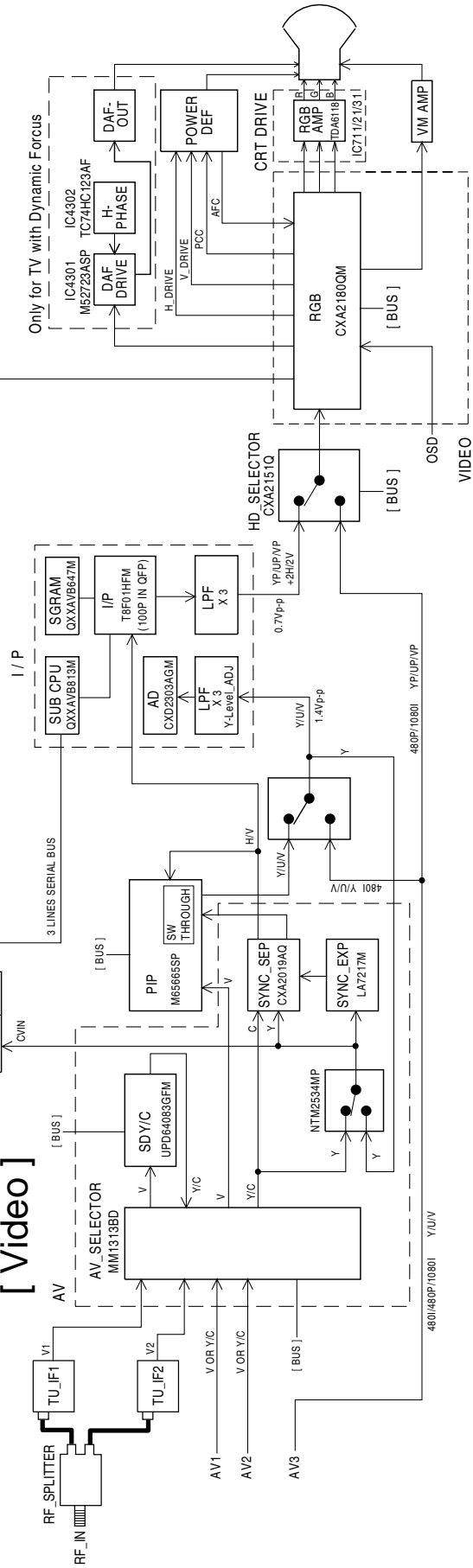


# SIGNAL LINES

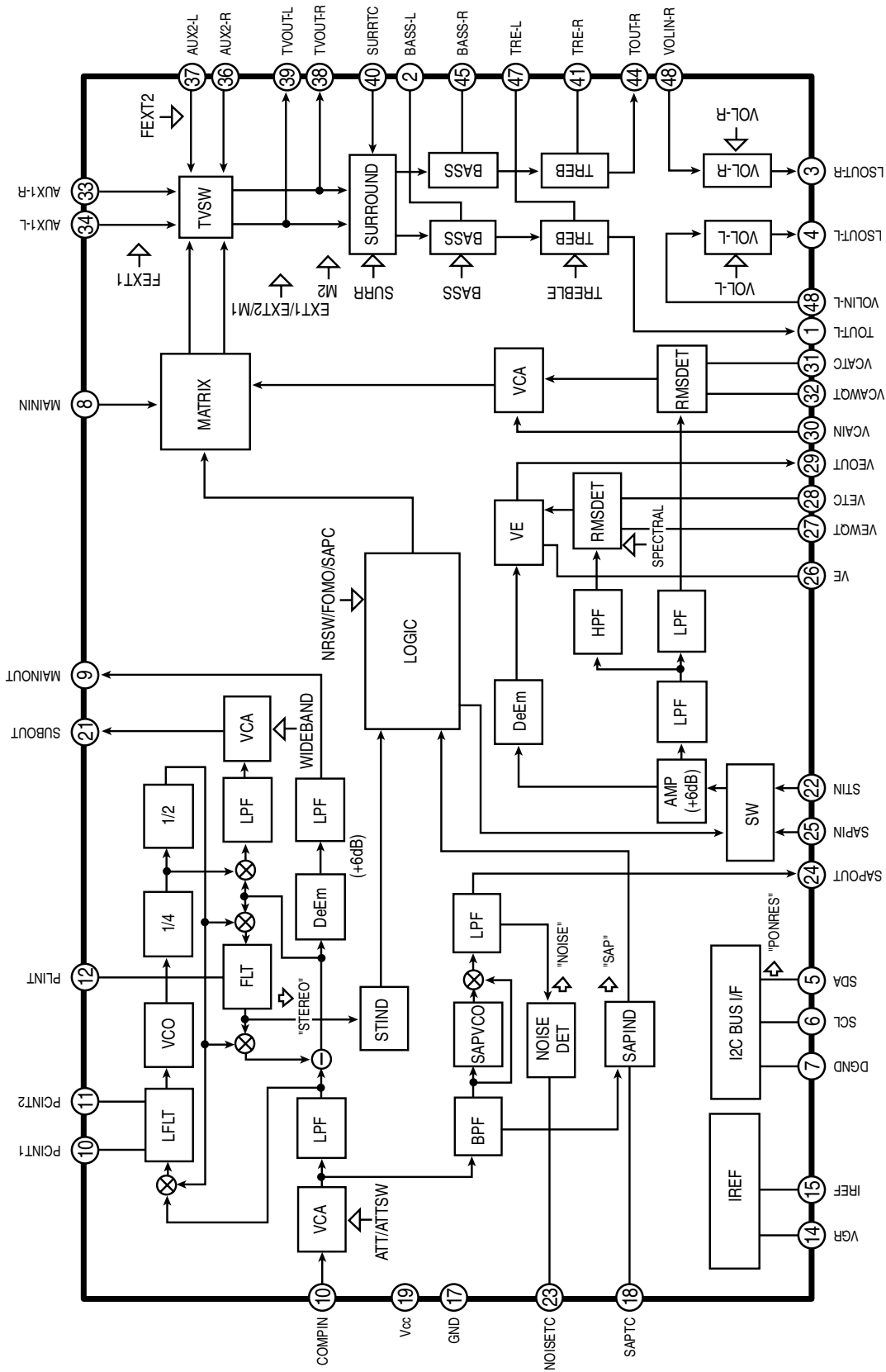
## [ Audio ]



## [ Video ]

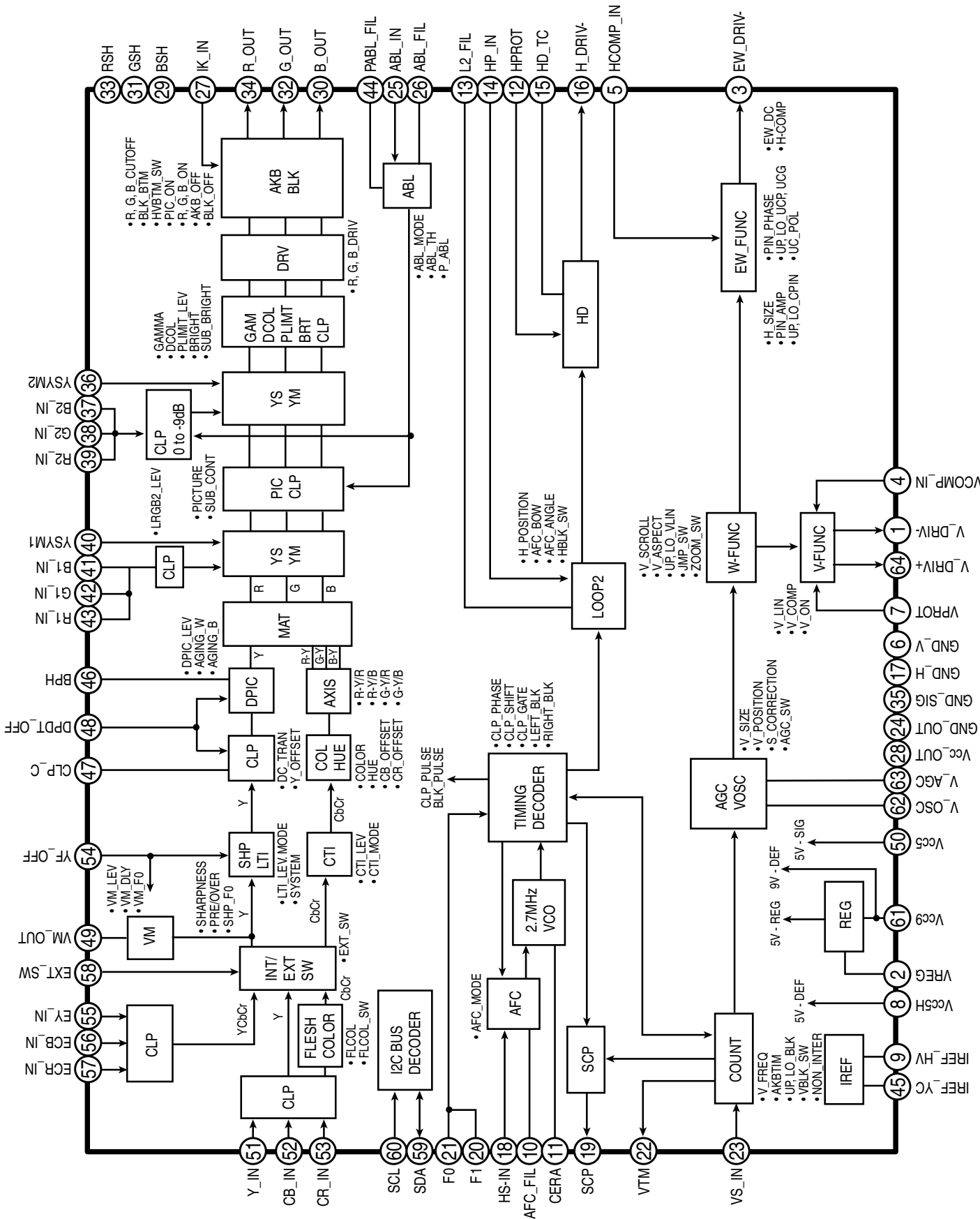


# IC3401 AUDIO PROCESSOR BLOCK DIAGRAM



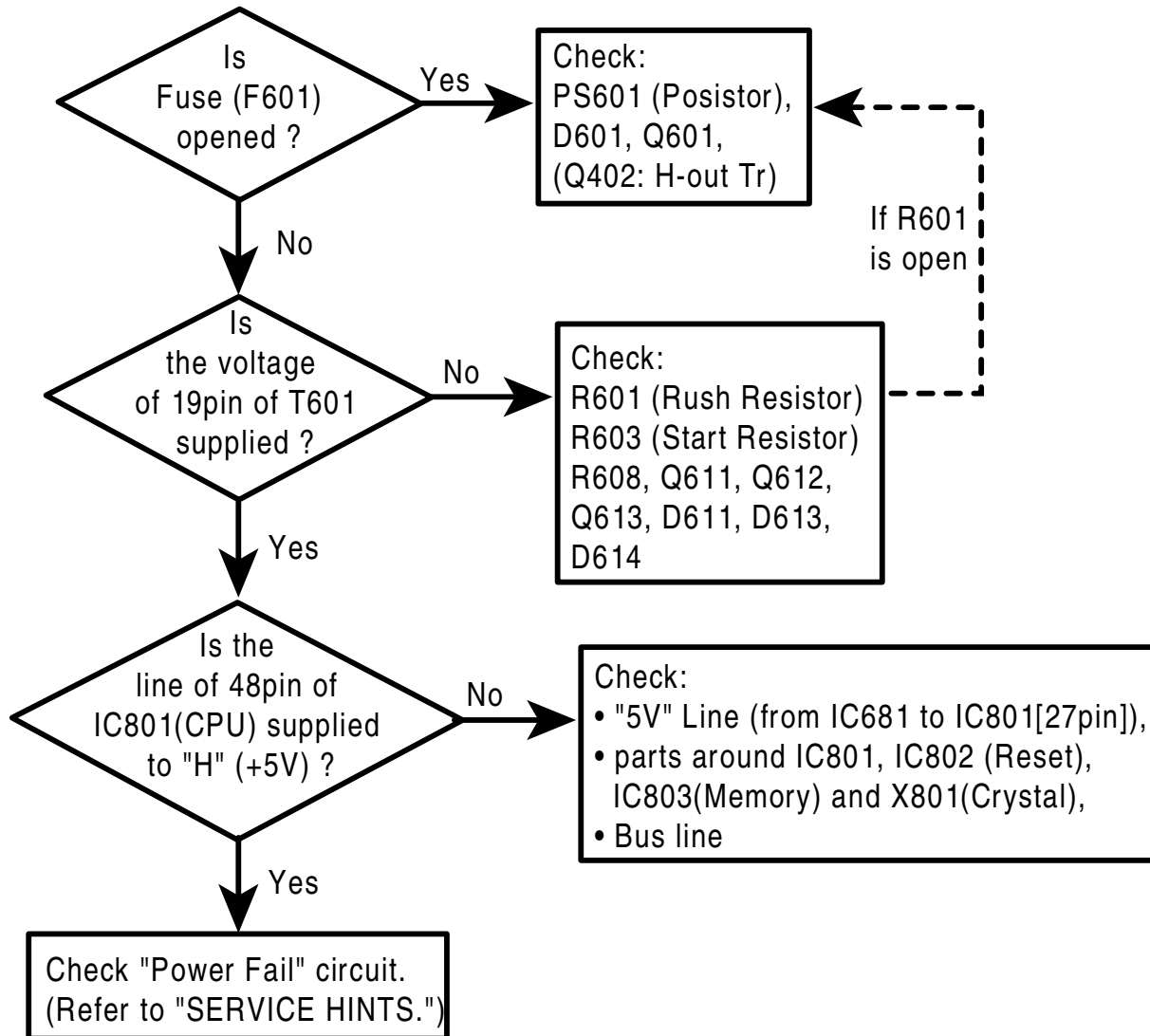


## IC2501 CRT DRIVER BLOCK DIAGRAM

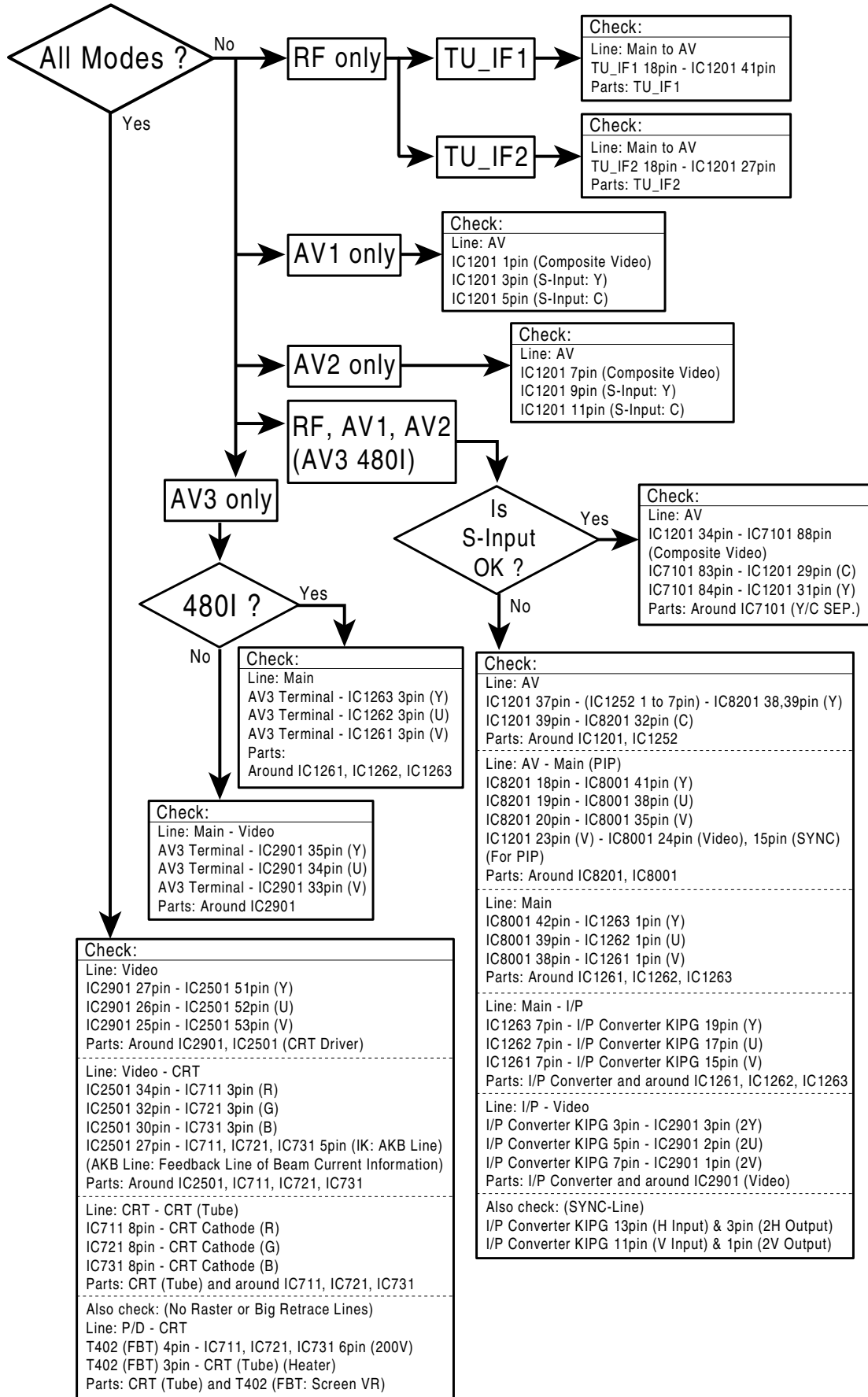


# TROUBLESHOOTING FLOW CHARTS

## NO POWER

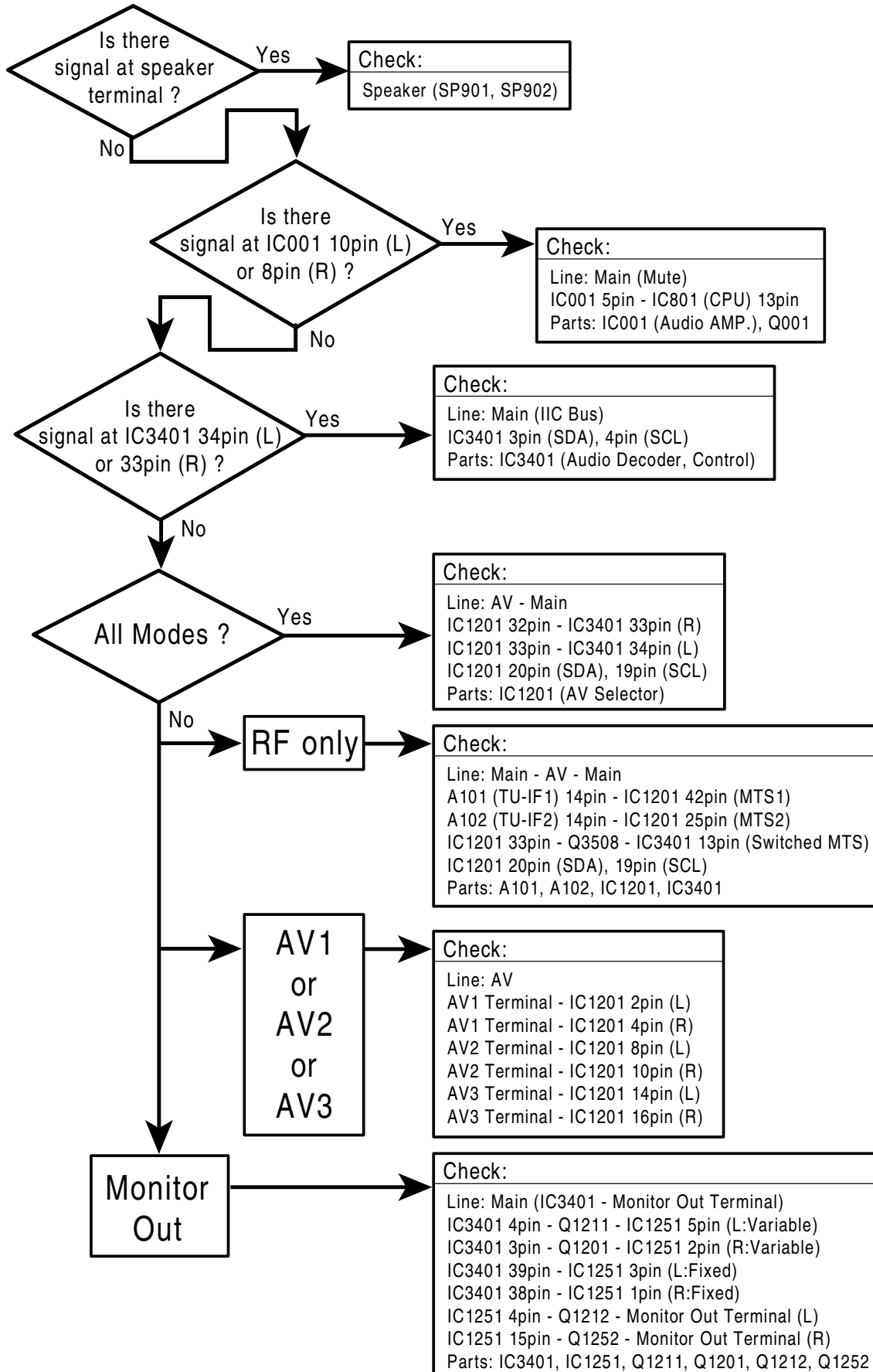


# NO PICTURE

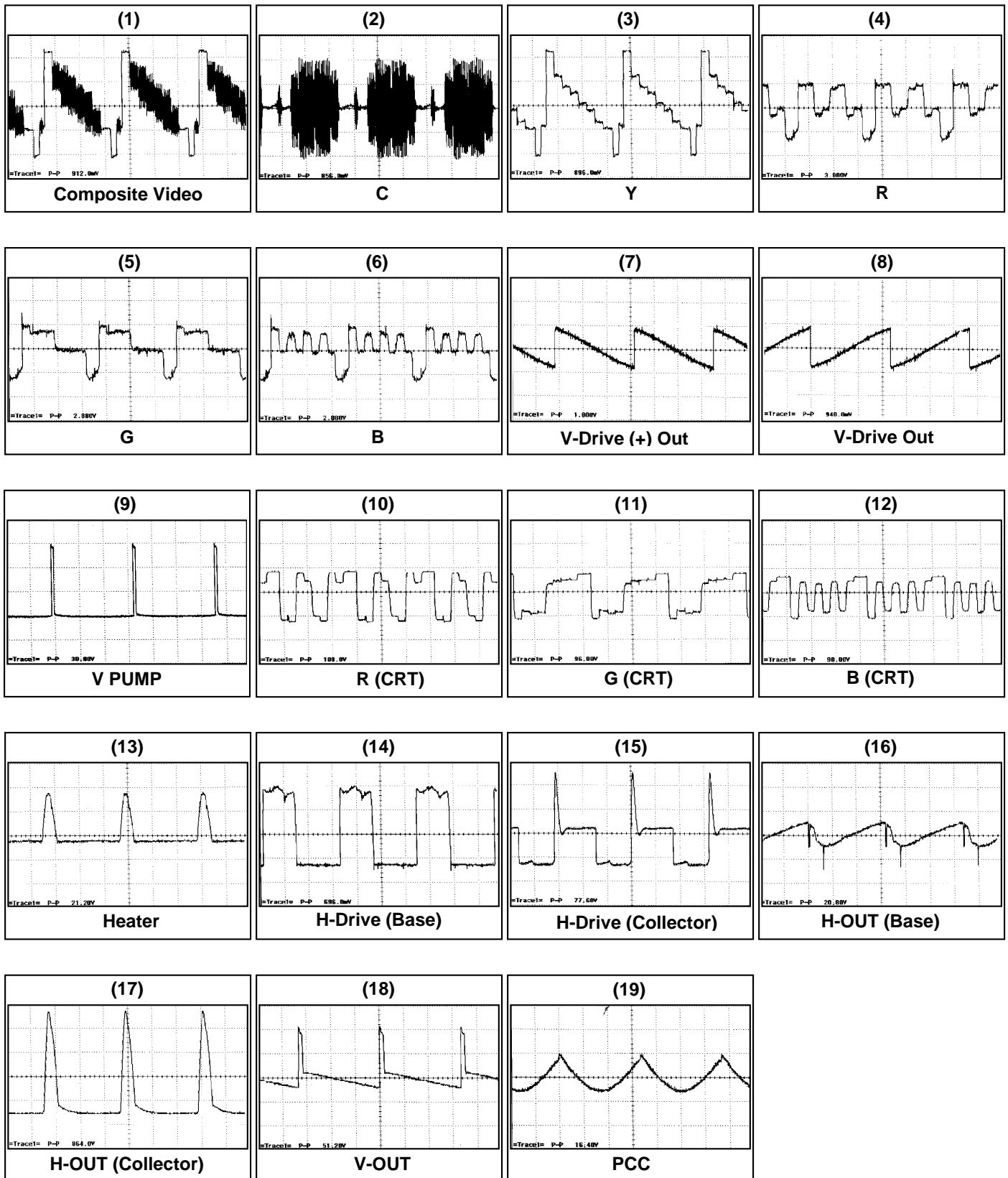


# TROUBLE SHOOTING FLOW CHARTS (Cont.)

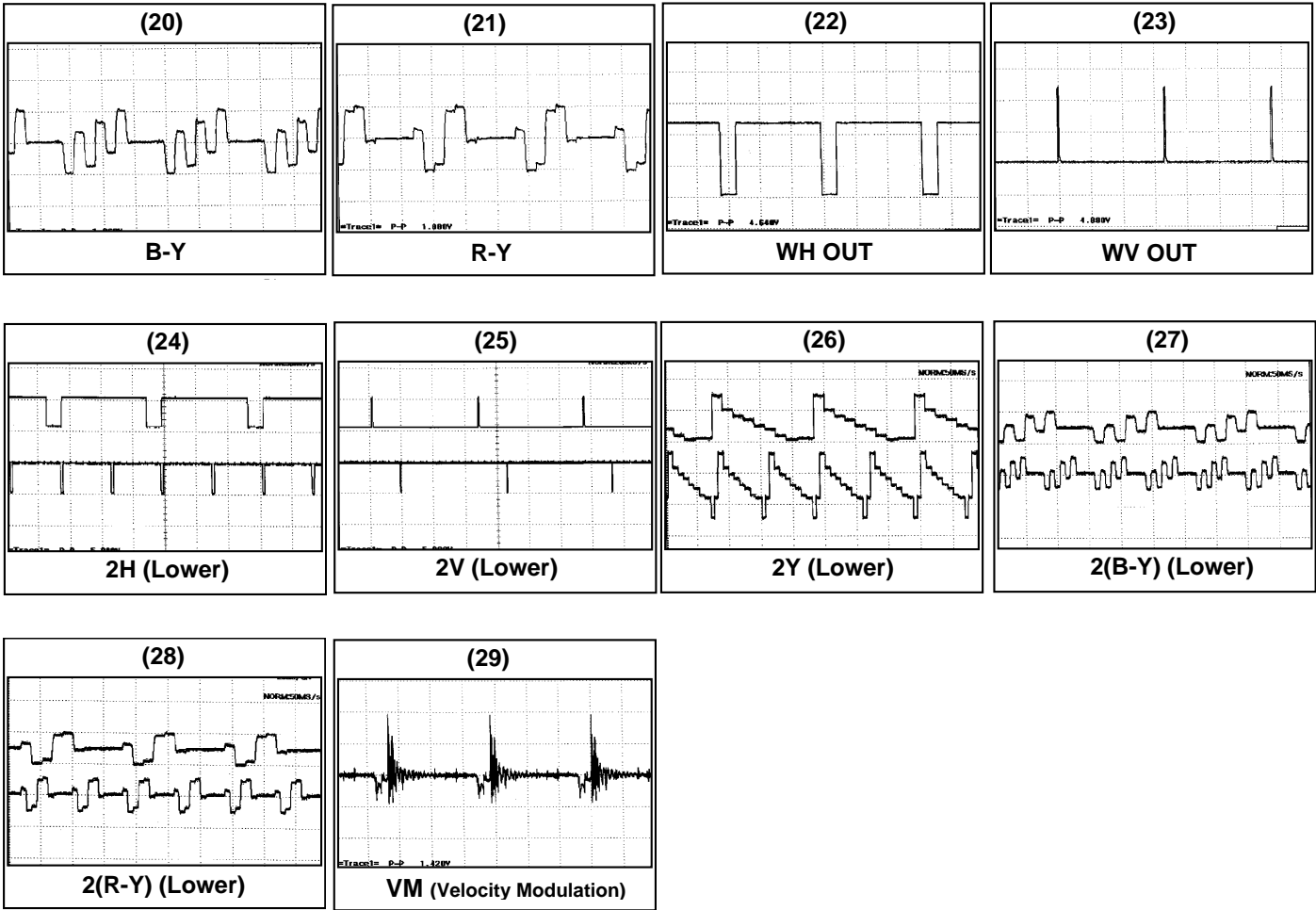
## NO SOUND



# WAVEFORMS



# WAVEFORMS (CONT.)



# CONTROL PORT FUNCTION

## System Control (CPU : IC801)

Pin	Name	Function	I/O	Description
1	Hsync	Hsync	IN	H-SYNC Input (Negative Polarization)
2	Vsync	Vsync	IN	V-SYNC Input (Negative Polarization)
3	AD4	KEY-IN	IN	Key Input
4	P41/INT2	NC	IN	-
5	P42/TIM2	NC	IN	-
6	P43/TIM3	NC	IN	-
7	AD3	AFT S-IN 1	IN	S-Curve Input 1(AFT) to Tuner
8	AD2	AFT S-IN 2	IN	S-Curve Input 2(AFT) to Tuner
9	P26/AD1	AV3 SW	OUT	AV3:H
10	P27/AD5	BPF-SW	OUT	AV1 or AV2 (Main Picture) : H
11	P00	TV POWER FAIL IN	IN	Power Fail Input Fail : L (Normal : H)
12	P01/PWM5	NC	OUT	-
13	P02	AMP MUTE OUT	OUT	Mute On : H
14	P17/Sin/R0	NC	IN	-
15	INT1	RC IN	IN	Remote Control Input
16	P45/Sout	NC	OUT	-
17	P46/Sclk	NC	IN	-
18	AVcc	-	-	-
19	HLF	HLF OUT	OUT	For Caption
20	P72/(Sin)	NC	IN	-
21	Vhold	VHOLD IN	IN	For Caption
22	Cvin	VIDEO IN	IN	For Caption
23	CNVss	CNVss	IN	GND
24	Xin	Xin	IN	CPU System Clock (8MHz)
25	Xout	Xout	OUT	CPU System Clock (8MHz)
26	Vss	Vss	IN	GND
27	Vcc	Vcc	IN	+5V
28	OSC1	OSC1	IN	For On Screen Display (Input)
29	OSC2	OSC2	OUT	For On Screen Display (Output)
30	RESET	RESET IN	IN	Reset Input (Fron H to L)
31	P31	31KHz SW	OUT	1125I : H
32	P30	HV SW	OUT	525I / 525P : H, 1125I : L
33	PWM7	DAFH CONTROL	OUT	Not Used
34	P16	BUS SW FOR AV	OUT	H : SW ON, L : SW OFF
35	P15	BUS SW FOR TV	OUT	H : SW ON, L : SW OFF
36	SDA2	IIC SDA of NV	I/O	IIC Data for NV, Active Low
37	SDA1	IIC SDA of IC	I/O	IIC Data for IC, Active Low
38	SCL2	IIC SCL of NV	OUT	IIC Clock for NV, Active Low
39	SCL1	IIC SCL of IC	OUT	IIC Clock for IC, Active Low
40	P10/OUT2	OSD BLK(HLF) OUT	OUT	Positive (Halftone)
41	P23	ACK OUT	OUT	IICBUS for Factory Line, Bus Open : H, Normal : L
42	P22	STATUS IN	IN	IICBUS for Factory Line, Normal : H, Open Request : L
43	P21	FIX/VARIABLE SEL	OUT	FIX:H VARIABLE:L
44	P20	NC	OUT	-
45	P07	SUB-CPU SO	OUT	For Communication to Progressive Sub CPU
46	P06	SUB-CPU CE	OUT	For Communication to Progressive Sub CPU
47	P05	SUB-CPU CLK	OUT	For Communication to Progressive Sub CPU
48	P04	TV RELAY OUT	OUT	TV On : H
49	OUT1	OSD BLK OUT	OUT	Positive Polarization
50	B/B1	OSD B OUT	OUT	Positive Polarization
51	G/G1	OSD G OUT	OUT	Positive Polarization
52	R/R1	OSD R OUT	OUT	Positive Polarization

For parts or service contact

**SANYO Fisher Service Corporation**  
**21605 Plummer Street**  
**Chatsworth, CA 91311 (U.S.A.)**

**300 Applewood Crescent,**  
**Concord, Ontario L4K 5C7 (CANADA)**


May / 2003 / 2000 SMC

Printed in U.S.A.



SCHEMATIC DIAGRAMS

NOTES ON SCHEMATIC DIAGRAMS

1. All resistance values in ohms K=1,000 M=1,000,000.
2. Unless otherwise noted on schematic, all capacitor values less than 1 are expressed in  $\mu\text{F}$  (Micro Farad), and the values more than 1 are in pF.
3. Unless otherwise noted on schematic, voltage reading taken with VOM from point indicated to chassis ground. Voltage reading taken using color-bar signal VHF channel 5, all controls at normal. Line voltage at 120 volts. Some voltages may vary with signal strength.
4. Waveforms were taken with color-bar signal and controls set for normal picture. Waveforms marked with an \* may vary with signal strength.
5. The Symbol  indicates a fusible resistor, which protects the circuit from possible short circuits.

SERVICE NOTES:

1. When replacing parts on circuit boards, clamp the lead wires to terminals before soldering.
2. When replacing high wattage resistors on circuit board, keep the resistor body 10 mm (3/8) from circuit board.
3. Keep wires away from high voltage and high temperature components.

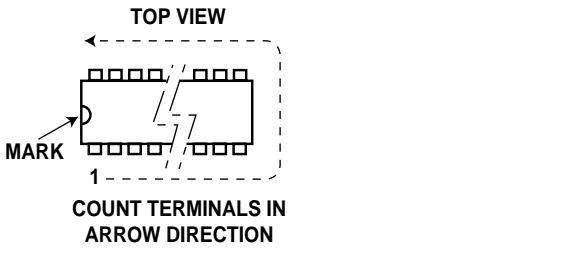
PRODUCT SAFETY NOTE

THE COMPONENTS DESIGNATED BY A STAR (\*) ON THIS SCHEMATIC DIAGRAM DESIGNATE COMPONENTS WHOSE VALUES ARE OF SPECIAL SIGNIFICANCE TO PRODUCT SAFETY. SHOULD ANY COMPONENT DESIGNATED BY A STAR NEED TO BE REPLACED, USE ONLY THE PART DESIGNATED IN THE PARTS LIST. DO NOT DEVIATE FROM THE RESISTANCE, WATTAGE AND VOLTAGE RATINGS SHOWN.

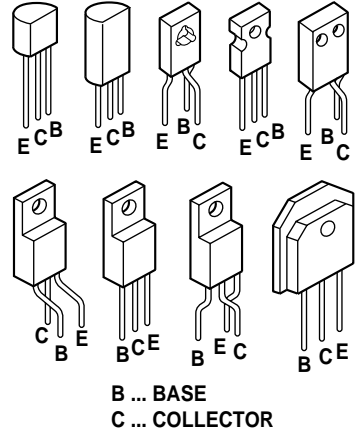
X-RADIATION WARNING NOTE

THIS TV CONTAINS CRITICAL PARTS TO PROTECT AGAINST X-RADIATION. NOMINAL 2ND ANODE VOLTAGE IS 32.5KV AT ZERO BEAM CURRENT AT 120 VOLTS AC LINE, AND MUST NOT EXCEED 34.6KV UNDER ANY OPERATING CONDITION. SEE HIGH VOLTAGE CHECK ON PAGE 14.

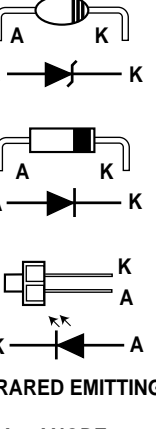
INTEGRATED CIRCUITS



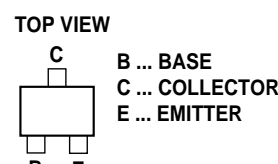
TRANSISTORS



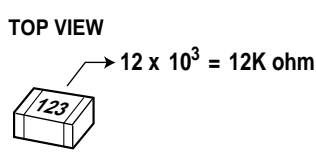
DIODES



CHIP TRANSISTORS



CHIP RESISTORS



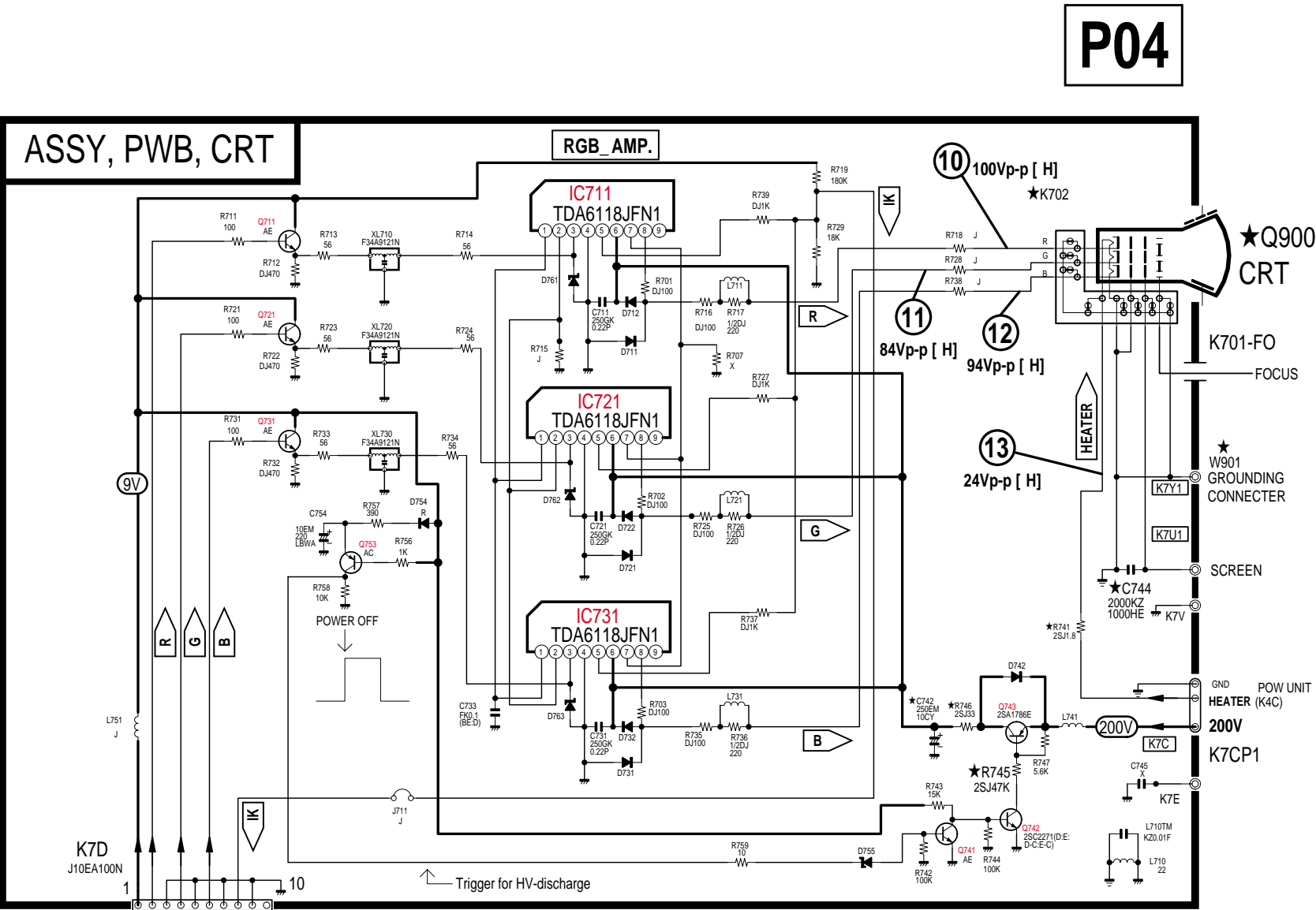
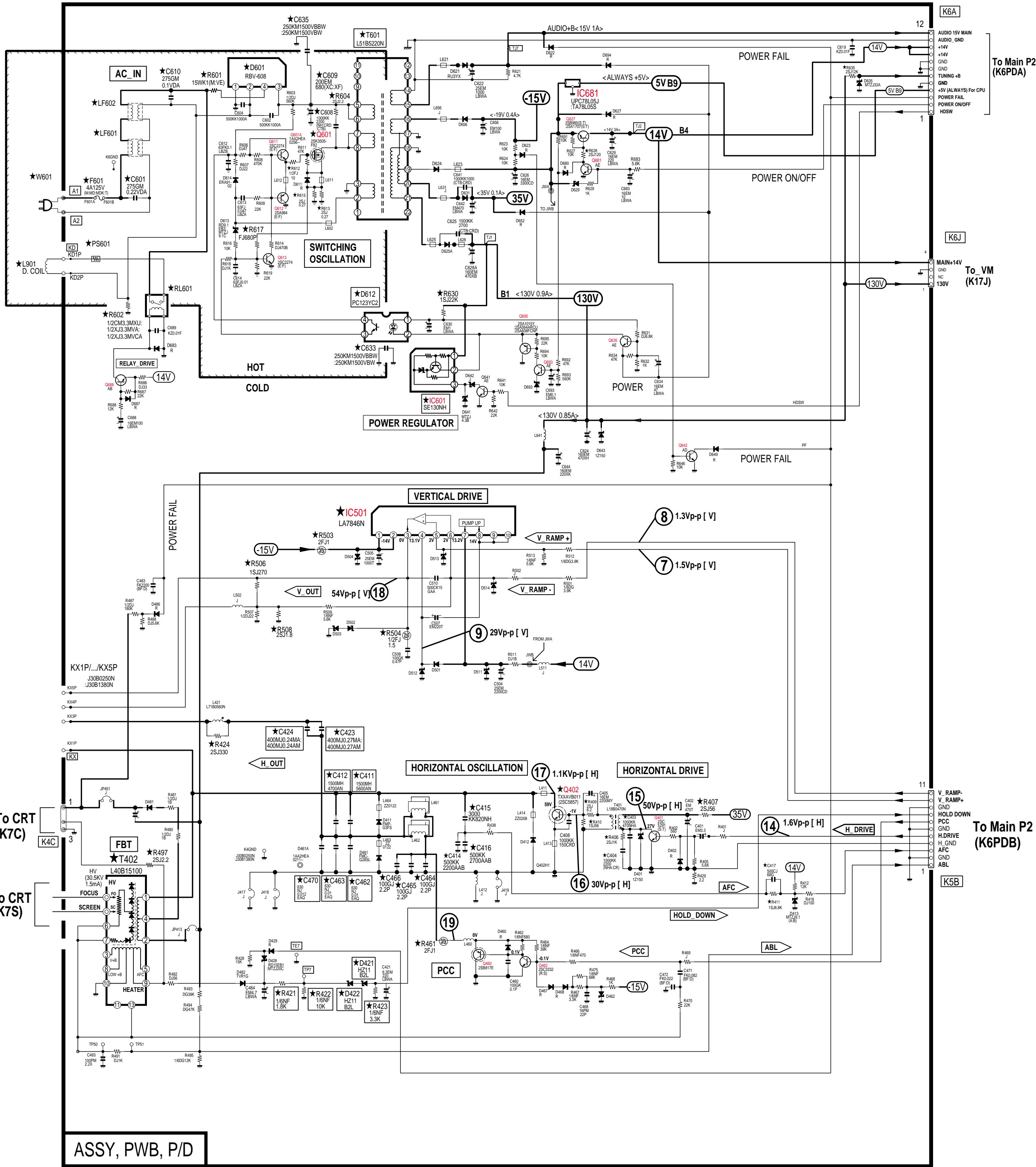
CAPACITOR AND RESISTOR CODE CHART

CAPACITOR (Example)

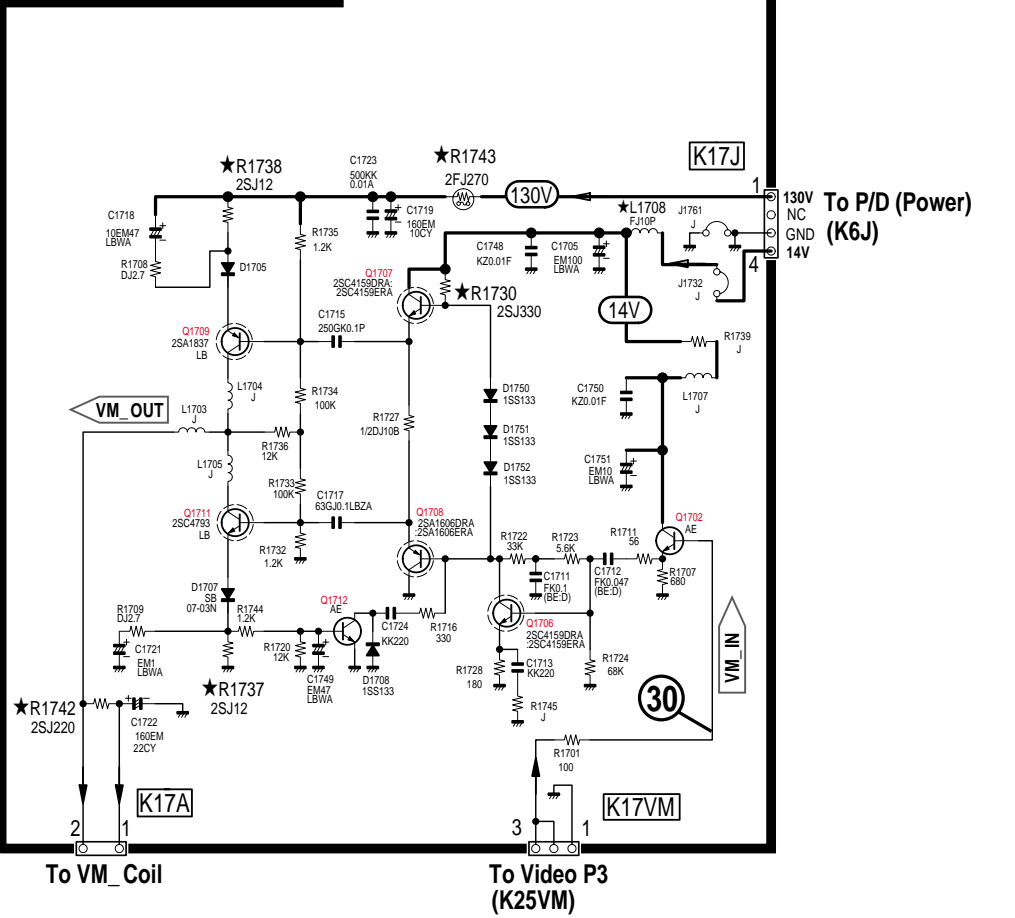
500	C	K	1500	B
Characteristics				D .....
Value code				T .....
Tolerance code				J .....
Material code				K .....
Voltage rating				M .....
				N .....
				P .....
				Z .....
				C .....
				E .....
				F .....
				N .....
				T .....
				K .....
				H .....
				P .....
				M .....

RESISTOR (Example)

6	Y	K	4.7																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																								
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ASSY, PWB, VM



CRT  
POWER-DEFLECTION  
VM



